

Undergraduate Catalog 1984-85

Ohio University Bulletin



July 1984

Undergraduate Catalog 1984-85

Ohio University Bulletin

The fees, programs, and requirements contained in this bulletin are effective with the 1984 fall quarter.

They are necessarily subject to change without notice at the discretion of Ohio University. It is the student's responsibility to know and follow current requirements and procedures at the departmental, college, and University levels.

Ohio University is fully accredited by the North Central Association of Colleges and Schools at the bachelor's, master's, and doctoral levels.

In addition, numerous departments, colleges, and schools within the University hold individual accreditation from their professional accrediting agencies.

Ohio University is an affirmative action institution.

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Academic Calendar, 1984-85

Fall Quarter, 1984

- Aug. 15, *Wed.* Deadline for 1st fall quarter payment for students on Monthly Payment Plan.
 Aug. 17, *Fri.* Last day to pay fall quarter fees to ensure preregistration.
 Sept. 5, *Wed.* Residence halls open for precollege and on-campus groups only at 9 a.m.
 Sept. 5-8 Orientation for all new freshmen and transfer students not attending summer precollege.
 Sept. 7, *Fri.* Advising day; residence halls officially open at 8 a.m.
 Sept. 8, *Sat.* Class schedule adjustment day; registration day.
 Sept. 10, *Mon.* Classes begin — Athens and regional campuses; first meal served on board plan (breakfast).
 Sept. 14, *Fri.* Deadline for 2nd fall quarter payment for students on Monthly Payment Plan.
 Sept. 21, *Fri.* Last day to register for fall quarter; last day to add a class; last day to receive partial refund of registration fees; last day to register for pass/fail course; last day to process a change order without paying fee.
 Sept. 24, *Mon.* Courses dropped will not remove fees for hours dropped; courses added will add fees, when applicable; first day for WP/WF; late registration (\$20 fee assessed effective this date).
 Sept. 26, *Wed.* Last day for filing application and paying fee for conferral of degree on November 21.
 Oct. 12, *Fri.* Last day to drop a class.
 Oct. 15, *Mon.* Deadline for 3rd fall quarter payment for students on Monthly Payment Plan.
 Oct. 19, *Fri.* Last day for removing incomplete grades incurred during last session enrolled.
 Oct. 29-Nov. 1 Winter quarter preregistration and academic advising.
 Nov. 12, *Mon.* Veterans Day holiday observed (offices closed; classes in session).
 Nov. 13, *Tues.* Last day to withdraw from the University for fall quarter.
 Nov. 14, *Wed.* Last day of classes; degree candidates must have all required work completed.
 Nov. 15, *Thurs.* Reading day; Deadline for 1st winter quarter payment on Monthly Payment Plan.
 Nov. 16, *Fri.* Examinations begin.
 Nov. 21, *Wed.* Quarter closing date; last meal served on board plan (lunch); residence halls close at 5 p.m.
 Nov. 22, *Thurs.* Thanksgiving Day (offices closed).
 Nov. 23, *Fri.* Columbus Day holiday observed (offices closed).
 Nov. 26, *Mon.* Deadline for all grades, including pending grades from previous quarters for degree candidates.
 Dec. 3, *Mon.* Last day to pay winter quarter fees to ensure preregistration.
 Dec. 14, *Fri.* Deadline for 2nd winter quarter payment for students on Monthly Payment Plan.

Winter Quarter, 1985

- Jan. 6, *Sun.* Residence halls open at 10 a.m.; new student orientation begins at 1 p.m.
 Jan. 7, *Mon.* Advising day; class schedule adjustment day; registration day; first day of classes on regional campuses.
 Jan. 8, *Tues.* Classes begin—Athens campus; first meal served on board plan (breakfast).
 Jan. 15, *Tues.* Martin Luther King Day (offices open; no classes); deadline for 3rd winter quarter payment for students on Monthly Payment Plan.
 Jan. 21, *Mon.* Last day to register for winter quarter; last day to add a class; last day to receive partial refund of registration fees; last day to register for pass/fail course; last day to process a change order without paying fee.
 Jan. 22, *Tues.* Courses dropped will not remove fees for hours dropped; courses added will add fees, when applicable; first day for WP/WF; late registration (\$20 fee assessed effective this date).
 Jan. 23, *Wed.* Last day for filing application and paying fee for conferral of degree on March 23.
 Feb. 11, *Mon.* Last day to drop a class.
 Feb. 12-15 Spring quarter preregistration and academic advising.
 Feb. 15, *Fri.* Deadline for 1st spring quarter payment for students on Monthly Payment Plan.
 Feb. 18, *Mon.* Last day for removing incomplete grades incurred during last session enrolled.
 Mar. 1, *Fri.* Last day to pay fees for spring quarter (to ensure preregistration).
 Mar. 15, *Fri.* Last day to withdraw from the University for winter quarter; deadline for 2nd spring quarter payment for students on Monthly Payment Plan.
 Mar. 16, *Sat.* Last day of classes; degree candidates must have all required work completed.
 Mar. 18, *Mon.* Examinations begin.
 Mar. 22, *Fri.* Last meal served on board plan (dinner).
 Mar. 23, *Sat.* Quarter closing date; residence halls close at 2 p.m.
 Mar. 25, *Mon.* Deadline for all grades, including pending grades from previous quarters for degree candidates.

Spring Quarter, 1985

- Mar. 31, *Sun.* Residence halls open at 10 a.m.; new student orientation begins at 1 p.m.
- Apr. 1, *Mon.* Advising day; class schedule adjustment day; registration day; first day of classes on regional campuses.
- Apr. 2, *Tues.* Classes begin—Athens campus; first meal served on board plan (breakfast).
- Apr. 15, *Mon.* Last day to register for spring quarter; last day to add a class; last day to receive partial refund of registration fees; last day to register for pass/fail course; last day to process a change order without paying fee; deadline for 3rd spring quarter payment for students on Monthly Payment Plan.
- Apr. 16, *Tues.* Courses dropped will not remove fees for hours dropped; courses added will add fees, when applicable; first day for WP/WF; late registration (\$20 fee assessed effective this date).
- Apr. 17, *Wed.* Last day for filing application and paying fee for conferral of degree on June 15.
- Apr. 22-May 10 Summer quarter preregistration.
- May 6, *Mon.* Last day to drop a class.
- May 13, *Mon.* Last day for removing incomplete grades incurred during last session enrolled.
- May 20-23 Fall quarter preregistration.
- May 30, *Thurs.* Memorial Day (offices closed; no classes).
- June 3, *Mon.* Last day to pay summer quarter fees to ensure preregistration.
- June 7, *Fri.* Last day to withdraw from the University for spring quarter.
- June 8, *Sat.* Last day of classes.
- June 10, *Mon.* Examinations begin.
- June 15, *Sat.* Quarter closing date; Annual Commencement; last meal served on board plan (breakfast); residence halls close at 5 p.m.
- June 17, *Mon.* Deadline for all grades, including pending grades from previous quarters for degree candidates.

Summer Quarter, 1985

First Term

- June 16, *Sun.* Residence halls open at 10 a.m.; new student orientation at 1 p.m.
- June 17, *Mon.* Registration day; classes begin; first meal served on board plan (breakfast).
- June 20, *Thurs.* First-term students should apply and pay fee for conferral of undergraduate and graduate degrees for summer session (August 24); final deadline for applying is July 25.
- June 21, *Fri.* Last day to register for first 5-week term; last day to add a class; last day to receive partial refund of registration fees; last day to register for pass/fail course; last day to process a change order without paying fee.
- June 24, *Mon.* Courses dropped will not remove fees for hours dropped; courses added will add fees, when applicable.
- July 2, *Tues.* Last day to drop a class for first term.
- July 4, *Thurs.* Independence Day (offices closed; no classes).
- July 19, *Fri.* Last day to drop a ten-week course; last day of classes; examinations; degree candidates must have all required work completed (including work pending from previous quarters) and submitted to instructor.
- July 20, *Sat.* Term closing date; last meal served for first session (lunch).
- July 22, *Mon.* Deadline for all grades, including pending grades from previous quarters for degree candidates.

Second Term

- July 21, *Sun.* New student orientation begins at 1 p.m.; first meal served for second session (brunch).
- July 22, *Mon.* Registration day; classes begin.
- July 25, *Thurs.* Last day for filing application and paying fee for conferral of undergraduate and graduate degree on August 24.
- July 26, *Fri.* Last day to register for second 5-week term; last day to add a class; last day to receive partial refund of registration fees; last day to register for pass/fail course; last day to process a change order without paying fee.
- July 29, *Mon.* Courses dropped will not remove fees for hours dropped; courses added will add fees, when applicable; first day for WP/WF.
- Aug. 6, *Tues.* Last day to drop a class for second term.
- Aug. 23, *Fri.* Last day of classes; examinations; degree candidates must have all required work completed (including work pending from previous quarters) and submitted to instructor; last meal served on board plan (dinner).
- Aug. 24, *Sat.* Quarter closing date; residence halls close at 2 p.m.
- Aug. 26, *Mon.* Deadline for all grades, including pending grades from previous quarters for degree candidates.

Direct Inquiries Concerning:

Admissions information and acceptance of credits to the
Office of Admissions, Chubb Hall

Athletics to Intercollegiate Athletics, Convocation Center

Campus tours to the Office of Admissions, Chubb Hall

Continuing education, independent study, workshops, or conferences
to the Office of Lifelong Learning, Tupper Hall

Curricula and undergraduate degree requirements to the
office of the dean of the college in question

Financial aids, scholarships, loans, and student employment to the
Office of Student Financial Aids and Scholarships, Chubb Hall

Graduate study to the Office of Graduate Student Services, Wilson Hall

Housing to the Office of University Housing, Chubb Hall

Osteopathic Medicine to the
College of Osteopathic Medicine, Grosvenor Hall

Registration, class schedules, and veterans' affairs to the
Office of Registration, Chubb Hall

Transfer students to the Office of Admissions, Chubb Hall

Address as follows:

Office Name
Building or College
Ohio University
Athens, Ohio 45701-2979

The University switchboard number is 614/594-5511

Profile of Ohio University



Profile of Ohio University

The charm of tree-lined brick walkways on Ohio University's College Green makes one feel as if one were at a small college rather than a large university. Much of what goes on at Ohio University has this personalized feeling, a unique trait for a school of its size.

The City of Athens, home of the University, is located about 75 miles southeast of Columbus. It's a small city on the banks of the Hocking River, surrounded by small farms on the hills and in the valleys, along with woodlands and state parks. The intellectual and cultural intensity of the University could have no better setting for privacy or meditation when it is needed.

The heritage of Ohio University goes back to the 18th century and the Ordinance of 1787, which included a provision for establishing the school. The University was actually founded in 1804, making it the first institution of higher learning in the old Northwest Territory.

The three oldest buildings on the College Green, red brick structures with wooden shutters, date from the early 19th century and are fine examples of Georgian architecture. One of them, Cutler Hall, in the center of campus, was built in 1816 and has been designated a National Historic Landmark.

The University offers a wide range of cultural activities to not only the University community but to all of southeastern Ohio. All of the lecturers, poets, singers, dancers, films, and theater or music groups appearing on campus are available within walking distance of the residence halls. Many events are free, though some do have nominal charges.

Stroud's Run State Park is just outside the Athens Corporation limit, and there are 11 more state parks and thousands of acres of national forest within 40 miles of the campus. The parks have facilities for swimming, boating, camping, hiking, picnicking, and fishing. When one needs to get away, it's possible to walk for hours in the woods without running across dwellings, cars, or other people. But if city life is a necessity now and then, Columbus and Cincinnati are reasonably close.





Campus Visits

The best way to know what our educational setting is like is to visit our campus. There's no better way to see what the living accommodations are like than to visit one or more of the three residential hall groupings, called greens, that surround the main campus. The greens are separate neighborhoods or communities within the University, adding to the personalized atmosphere of the Athens campus.

An admissions field representative can schedule appointments for you with faculty in your field of interest, or you may wish to write directly to the Office of Admissions, Chubb Hall, Ohio University, Athens, Ohio 45701-2979. Guides are available year round and appointments are preferred but not required. Walking tours of the campus lasting approximately one hour start at the Office of Admissions at 10 a.m. and 2 p.m., Monday through Friday and Saturdays at noon. The Office of Admissions is open for appointments from 9 to 11:30 a.m. and from 1 to 4 p.m., Monday through Friday. On Saturdays, there is a group information session at 11 a.m.

Affirmative Action

It is the policy of Ohio University that there shall be no discrimination against any individual in educational or employment opportunities because of race, color, religion, national origin, sex, veteran status, or handicap. Also, there shall be no discrimination because of age except in compliance with requirements of retirement plans or state and federal laws and guidelines. Furthermore, the University maintains a vigorous affirmative action program in order to promote equal employment opportunities and to ensure nondiscrimination in all educational programs and activities.

Information regarding University programs and policies, as well as related state and federal provisions, are available through the Office of Affirmative Action, 103 McGuffey Hall.



The Student Body

We can safely say that a typical Ohio University student cannot be found. The one characterization we can apply to the student body is that it is culturally diverse. The exposure to other races, nationalities, religions, and ethnic groups is a basic part of an educational experience. Life in a city usually doesn't provide the diverse day-to-day contact one is likely to have on a campus, with students from all over the United States, as well as from Africa, Asia, Europe, and other parts of the world. Points of view from different cultures and lasting personal relationships will be invaluable.

The special needs of various minority groups have been met on the Ohio University campus. The needs of women have been taken into account in both academic and extracurricular programs at Ohio University. The English, history, and political science departments offer courses geared to women's issues, taught by female and male faculty alike. Many programs and speakers of interest are offered each year.

Women's intercollegiate athletics is an expanding program and women are part of the marching band.

Another way in which the University has taken into consideration the needs of a minority group is the establishment of the Lindley Student Center. Though developed to accommodate the unique interests and needs of black students, the center is not exclusively for blacks. One purpose in creating the center was to give white American and international students an opportunity to experience what people in another cultural group enjoy.

A further step along these lines are the International Houses within the residence hall system which allow roughly equal numbers of international students and American students to live together in the same building, sharing each other's cultural heritage.

The Office of Lifelong Learning, through the External Student Program and College Program for the Incarcerated, reaches a number of students across the country and throughout the world, who are pursuing their Ohio University degrees via Independent Study. The external students are nontraditional students engaged in careers or other activities which prevent them from attending the University or one of the regional campuses. They are truly involved in the lifelong learning process. The college program offers programs to the incarcerated.





Student Activities

University and student organizations regularly bring speakers and performing artists to campus. Among those who appeared here recently are the Cleveland Symphony, the Chinese Magic Circus of Taiwan, Ted Turner, George Shearing, Marian McPartland, Teddy Wilson, and Gray Panther Maggie Kuhn.

Popular performers have included Neil Young, Michael Stanley Band, Ramsey Lewis, Michael Urbaniak and Larry Coryell.

Approximately 200 student organizations exist on campus. Social fraternities and sororities, honorary, departmental, professional, recreational, volunteer, and special-interest groups are included. Many significant national honor societies have chapters on campus. These include Phi Beta Kappa and Phi Delta Kappa among others. Opportunities to do volunteer work in Athens and surrounding communities are offered by the Office of Student Activities.





Intercollegiate Athletics

Ohio University belongs to the Mid-American Conference, which includes Miami University, Bowling Green, Toledo, Kent State, Ball State, Northern Illinois, Eastern Michigan, Central Michigan, and Western Michigan. The University teams for men compete in baseball, basketball, cross country, football, golf, tennis, swimming, indoor and outdoor track, and wrestling. The women field teams in basketball, cross country, field hockey, softball, swimming, tennis, indoor and outdoor track, and volleyball.

Club sports at Ohio University include hockey, lacrosse, and rugby, and athletic facilities include the new Aquatic Center, gymnasiums, an indoor ice-skating rink, tennis courts, and areas for horseshoe pitching and softball. The West Green is the site of the athletic complex, and the multi-million-dollar Convocation Center is the major sports arena, as well as concert site, in southeastern Ohio.

Recreation

There are many recreational opportunities for men and women in the extensive intramural program. In addition, Baker Center (the University student center) provides facilities for bowling, billiards, and table tennis, as well as rooms for student meetings and campus-wide social and cultural events.

Several movies are shown on campus each week. Some are first-run films of a year or so ago, others are foreign film classics and experimental movies. The showings are sponsored by campus organizations at reduced prices.

Residence Hall Life

The residence hall areas are divided into four specific areas called greens. The individual halls are reserved exclusively for a particular type of student (i.e., freshman, upperclass, graduate, etc.), recognizing the special needs of each. University services are provided in all of the halls through the professionally trained live-in staff and consultants from other segments of the University community.

Particular emphasis is placed on meeting the needs of the new freshman student through the Freshman Residential Program. This program is committed to providing those services, skills, and growth opportunities that are so necessary to successful completion of your college career through interaction with faculty, staff, and other students within our University.

The special interests and talents of the individual student can be enhanced through participation in one or more of the many campus organizations. There is ample opportunity to participate in the government of your hall, green, or the campus. Many of these programs have been and continue to be designed by and for our student residents.

Individual Counseling

Counseling at Ohio University is available to help students with definite career goals as well as those who are undecided.

First, admissions counselors can help determine if Ohio University is the appropriate place for your studies. Faculty advisors in all departments can help decide if a suitable field has been chosen. If a student does not have a precise career choice, University College counselors can be of assistance. University College offers a bachelor of general studies degree, which allows students to structure their own degree programs, taking a wider variety of courses than would be possible through a major.

Counseling and Psychological Services provides career counseling, occupational information, educational counseling, and personal adjustment problem assistance, on a confidential basis. Individual and/or group counseling and psychological therapy are available.

Counselors in the Career Planning and Placement Office can help evaluate the present job market possibilities in most academic majors. They conduct slide presentations and mini-seminars dealing with how to conduct a job search, how to conduct yourself during interviews, and how to prepare resumes. They also have a series of self-help guides and a guide to self-evaluation in the job market.

Students have access to an extensive library of career information which includes application forms for state, federal, and private employment, graduate school catalogs, and telephone directories of 80 percent of our national metropolitan areas.

Since many summer employers actively recruit on campus, the Career Planning and Placement Office is a source of summer jobs as well. In addition, they will aid in preparing letters of inquiry and resumes and will help in obtaining summer jobs.





Academic Information

Students with definite areas of interest are admitted directly to the degree colleges of their choice and are assigned to faculty advisors. If the student has decided on a college but not a major, he or she may still enter the college. Undecided students and those who wish to explore several academic areas may be admitted to University College. Except for a University-wide freshman English composition requirement, there are no freshman course requirements common to all students; those with tentative majors refer to the specific requirements outlined under colleges in this catalog.



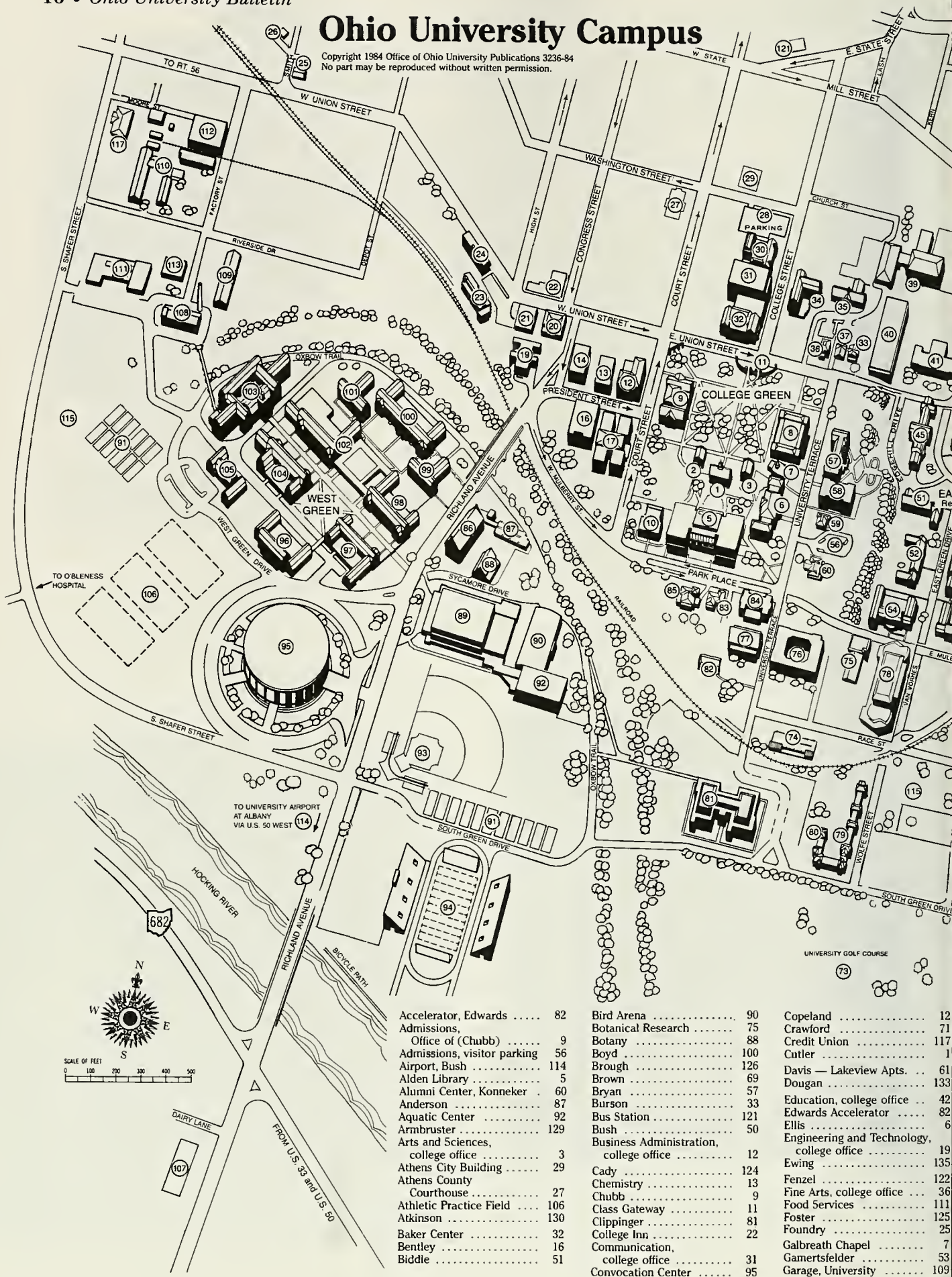
Faculty

The possibilities of personal contact are enhanced by the low student-faculty ratio. Though first-quarter freshmen are likely to be in fairly large classes in survey and introductory courses, class size tends to diminish as one's class rank increases. Upperclassmen will have classes close to the ratio.

Ohio University recognizes teaching as the faculty's primary responsibility.

Ohio University Campus

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- 57 Bryan
- 58 Tupper
- 59 McKee
- 60 Konneker Alumni Center
- 61, 62, 63, 64, 65, 66 Lakeview Apts.
- 68 Pickering
- 69 Brown
- 70 Mackinnon
- 71 Crawford
- 72 Nelson
- 73 Golf Course
- 74 Zoology Animal Science
- 75 Botanical Research
- 76 Scott Quadrangle
- 77 Natatorium Bldg.
- 78 Morton
- 79 Wolfe Street Apts.
- 80 Ullom Apts.
- 81 Clippinger
- 82 Edwards Accelerator
- 83 35 Park Place
- 84 Gordy
- 85 President's Residence
- 86 Porter
- 87 Anderson
- 88 Botany
- 89 Grover
- 90 Bird Arena
- 91 Tennis Courts
- 92 Aquatic Center
- 93 Trautwein Field
- 94 Peden Stadium
- 95 Convocation Center
- 96 Grosvenor
- 97 James
- 98 Sargent
- 99 Treudley
- 100 Boyd
- 101 Ryors
- 102 Irvine
- 103 Stocker
- 104 Wilson (residence hall)
- 105 Parks
- 106 Athletic Practice Field
- 107 Ohio University Inn
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- 114 Airport, Bush
- 115 Recreation Areas
- 116 Intramural Field
- 117 Credit Union
- 120 Mill Street Apts.
- 121 Bus Station
- 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136 South Green Residence Halls

- 1 Cutler
- 2 McGuffey
- 3 Wilson (administrative)
- 5 Library, Alden
- 6 Ellis
- 7 Galbreath Chapel
- 8 Memorial Auditorium
- 9 Chubb
- 10 Scripps
- 11 Class Gateway
- 12 Copeland
- 13 Chemistry
- 14 Innovation Center
- 16 Bentley
- 17 Lindley
- 19 Engineering and Technology
- 20 Haning
- 21 Lasher
- 22 College Inn
- 23 Heating Substation
- 24 Industrial Technology
- 25 Foundry
- 26 Glass Building
- 27 Athens County Courthouse
- 28 Parking Garage, Athens City
- 29 Athens City Building
- 30 Kantner
- 31 Radio-Television
- 32 Baker Center
- 33 56 E. Union Street
- 34 Voigt
- 35 Hudson
- 36 Trisolini Gallery
- 37 Jennings
- 39 Seigfred
- 40 Music
- 41 Putnam
- 42 McCracken
- 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55 East Green Residence Halls
- 56 Guest/Visitor Parking

Class Building	26	James	97	McGuffey	2	Physical Plant	110	Treudley	99
Golf Course	73	Jefferson	46	McKee	59	Pickering	68	Trisolini Gallery	36
Library	84	Jennings	37	Memorial Auditorium	8	Porter	86	True	132
Graduate Services Office	3	Johnson	47	Mill Street Apts.	120	President's Residence	85	Tupper	58
Government	96	Kantner	30	Morton	78	Putnam	41	Ullom Apts.	80
Center	89	Konneker Alumni Center	60	Music	40	Radio-Television	31	Union Street, 56 E.	33
Guest Housing (Scott)	76	Lakeview Apts. — Davis	61	Natatorium Bldg	77	Read	48	University College, office	9
Guest Visitor Parking	56	Lakeview Apts. — Hayes	62	Nelson Commons	72	Recreation Areas	115	Visitor Parking	
Planning	20	Lakeview Apts. #33	63	O'Brien	123	Ryors	101	(permission required)	56
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College office	96	Lakeview Apts. #36	66	college office		Scripps	10	Weld	128
Heating Plant	108	Lasher	21	Parking Garage,		Seigfred	39	Wilson (administrative)	3
Heating Substation	23	Laudvry	113	Athens City	28	Shively	54	Wilson (residence hall)	104
Library	136	Library, Alden	5	Parks	105	Smith	131	Wolfe Street Apts.	79
Industrial Technology	35	Lincoln	45	Park Place, 35	83	Stocker	103	WOUB-TV studios	31
Innovation Center	24	Lindley	17	Peden Stadium	94	Storeroom No. 2	112	Wray	134
Intramural Field	14	Mackinnon	70	Perkins	52	Tennis Courts	91	Zoology Animal Science	74
Intramural Field	116	Martroll	127			Tiffin	55		
Intramural Field	102	McCracken	42			Trautwein Field	93		

Library

The seven-story Alden Library houses well over 1 million volumes including periodicals and government documents. Current issues of more than 8,000 periodicals and newspapers are available, plus over 1 million microfilm units. The building will seat 3,200.

Honor Societies

These national organizations confer memberships in recognition of high scholastic attainment and the fulfillment of other constitutional requirements. Some of the societies recognize and encourage the development of a well-rounded personality and leadership and service qualities in addition to academic achievement.

Alpha Kappa Delta, *Sociology*
 Alpha Lambda Delta, *Scholarship*
 Alpha Pi Mu, *Industrial Engineering*
 Angel Flight, *Aerospace Studies*
 Arnold Air Society, *Aerospace Studies*
 Beta Alpha Psi, *Accounting*
 Beta Gamma Sigma, *Business Administration*
 Blue Key, *Scholarship, Activities*
 Delta Phi Alpha, *German*
 Delta Sigma Pi, *Business Administration*
 Delta Sigma Rho-Tau Kappa Alpha, *Forensics*
 Epsilon Pi Tau, *Industrial Arts Education*
 Eta Kappa Nu, *Electrical Engineering*
 Honor Society of Nursing
 Kappa Delta Pi, *Education*
 Kappa Kappa Psi, *Band*
 Kappa Tau Alpha, *Journalism*
 Mortar Board, *Scholarship, Activities*
 Omicron Delta Epsilon, *Economics*
 Omicron Delta Kappa, *Scholarship, Activities, Leadership*
 Pershing Rifles, *Military Science*
 Phi Alpha Theta, *History*
 Phi Beta Kappa, *Scholarship*
 Phi Delta Kappa, *Education*
 Phi Eta Sigma, *Scholarship*
 Phi Gamma Nu, *Business*
 Phi Kappa Phi, *Scholarship*
 Phi Mu Alpha, *Music*
 Phi Sigma Iota, *Romance Languages*
 Phi Upsilon Omicron, *Home Economics*
 Pi Gamma Mu, *Political Science, Social Sciences*
 Pi Kappa Lambda, *Music*
 Pi Mu Epsilon, *Mathematics*
 Sigma Alpha Iota, *Music*
 Sigma Pi Sigma, *Physics*
 Sigma Xi, *Science*
 Society for Professional Journalists/
 Sigma Delta Chi, *Journalism*
 Tau Beta Pi, *Engineering*
 Tau Beta Sigma, *Band*
 Women in Communications, Inc., *Journalism*



Guidelines and General Information



Academic Organization

College of Arts and Sciences

Preprofessional curricula. Curricula leading to the bachelor of arts, bachelor of science degrees. Preparation for teaching at the secondary level.

Departments and Units:

Afro-American Studies
Botany
Chemistry
Classical Languages
Computer Science
Economics
English Language and Literature
Environmental Studies
Geography
Geological Sciences
Gerontology
History
Liberal Studies
Linguistics
Mathematics
Modern Languages
 French
 German
 Italian
 Japanese
 Portuguese
 Russian
 Spanish
Ohio Program of Intensive English (OPIE)
Philosophy
Physics and Astronomy
Political Science
Psychology
Social Studies
Social Work
 Mental Health Technology
Sociology and Anthropology
Women's Studies
Zoological and Biomedical Sciences

College of Business Administration

Curricula leading to the bachelor of business administration degree.

Departments:

Accounting
Finance
Management Systems
Marketing

College of Communication

Curricula leading to bachelor of science in communication, and bachelor of science in journalism degrees.

Schools:

Interpersonal Communication
Journalism
Telecommunications

Center for Communication Management

Institute of Visual Communication

Interdisciplinary program coadministered with the College of Fine Arts

College of Education

Teacher-training curricula leading to the bachelor of science in education degree; supervision of student teaching and other field experience in education.

Schools:

Applied Behavioral Science and
Educational Leadership
Curriculum and Instruction

College of Engineering and Technology

Curricula leading to the bachelor of science in chemical engineering, bachelor of science in civil engineering, bachelor of science in electrical engineering, bachelor of science in industrial and systems engineering, bachelor of science in mechanical engineering, and bachelor of science in industrial technology degrees.

Departments:

Chemical
Civil
Electrical and Computer
Industrial and Systems
Industrial Technology
 Engineering Graphics
 Industrial Arts (Teaching)
 Industrial Technology
Mechanical
Aviation

College of Fine Arts

Curricula leading to the bachelor of fine arts and bachelor of music degrees.

Schools:

Art
 Art Education
 Art History
 Ceramics
 Graphic Design
 Painting
 Photography
 Printmaking
 Sculpture
Dance
 Dance
Music
 Applied Music
 Music Composition
 Music Education
 Music History and Literature
 Music Theory
 Music Therapy

Theater

Comprehensive Theater

Department of Comparative Arts

Department of Film

Institute of Visual Communication

Interdisciplinary program coadministered with the College of Communication



Office of Graduate Student Services

Programs leading to the master of arts, master of business administration, master of education, master of fine arts, master of science, and doctor of philosophy degrees.

College of Health and Human Services

Curricula leading to the bachelor of science in hearing and speech sciences; the bachelor of science in home economics; the bachelor of science in nursing; the bachelor of science in physical therapy; and the bachelor of science in health, physical education, and recreation programs.

Schools:

- Health and Sport Sciences
- Hearing and Speech Sciences
- Home Economics
- Nursing
- Physical Therapy

Honors Tutorial College

Attempts to provide the most flexible and challenging education possible both to the academically gifted and to the creative student through curricula leading to the bachelor's degree.

Center for International Studies

Offers a certificate of African, Asian, or Latin American studies to undergraduates as a supplement to the major.

- African Studies
- Latin American Studies
- Southeast Asian Studies

Office of Lifelong Learning

Provides educational opportunities beyond the regular channels of the University by utilizing the resources of the University in nontraditional ways.

Continuing Education, Conferences, and Workshops
Independent Study

College of Osteopathic Medicine

Offers a four-year professional program leading to the degree of doctor of osteopathy.

Regional Campuses

- Belmont County
- Chillicothe
- Lancaster
- Zanesville
- Fronton Branch
- Portsmouth Resident Credit Center

University College

Basic college for exploratory students at the freshman level. Two-year terminal programs leading to the associate in arts, associate in applied science, associate in applied business, and individualized studies degrees. Four-year programs leading to the bachelor of general studies and bachelor of criminal justice degrees. Two- and four-year Reserve Officers Training Corps programs leading to commissions in the U.S. Air Force and the U.S. Army.

Admission and Fees

A special publication for prospective students describing the University, its available programs, its admission procedures and regulations, and its history can be obtained by writing to the Office of Admissions, Chubb Hall, Ohio University, Athens, Ohio 45701-2979. Applications for admission to study at the undergraduate level may be obtained from the Office of Admissions.

Application materials and additional information about graduate study are available upon request to the Office of Graduate Student Services, Wilson Hall, Ohio University, Athens, Ohio 45701-2979.

WHEN TO APPLY

A person may apply for admission to undergraduate study following the junior year in high school.

New students are admitted to the fall quarter, which opens the second week in September; the winter quarter, which opens the first week in January; the spring quarter, which opens the fourth week in March; or the summer session, with terms which open the third week of June and the fourth week of July.

June 15 is the freshman application deadline for the fall quarter. However, for freshmen wanting on-campus housing, application by April 1 is advised. Applications for other terms are accepted up to one month before classes begin.

Interviews: A personal interview is not required for admission to Ohio University. However, prospective students and their parents are strongly encouraged to visit the campus and discuss plans with an admissions counselor. The Office of Admissions is open for appointments from 9 a.m. to 11:30 a.m. and from 1 p.m. to 4 p.m., Monday through Friday. On Saturdays, there is a group information session at 11 a.m. Tours of the campus are available Monday through Friday at 10 a.m. and 2 p.m. and Saturdays at noon. The Office of Admissions can also arrange at cost on-campus overnight accommodations and dining for prospective students, in addition to appointments with specific academic departments of the student's interest. Appointments with academic departments, available only Monday through Friday, may be made by writing or telephoning the Office of Admissions (614/594-5178).

The Office of Admissions sponsors a series of weekend programs for prospective students. Full details and reservation forms are available from the Office of Admissions.

APPLICATION PROCEDURES

The applicant's level of formal education and place of residence determine the procedures he or she follows in applying for admission to the University.

Freshman Applicant. A person who (1) has or soon will receive a secondary school diploma or a High School Equivalency Certificate and (2) has not been enrolled for

12 or more quarter hours of coursework at a college or university, applies as a freshman applicant.

To apply for freshman admission, a student submits a completed application form, the nonrefundable \$25 application fee for Athens-campus applicants (\$15 for regional-campus applicants), ACT or SAT scores, and an official high school transcript (sent directly from the high school to the Office of Admissions). Note that ACT or SAT scores are not required of students who have been out of high school for one year or more.

Notification of admission status is on a rolling basis, beginning in early fall. Students can expect to hear from the Office of Admissions within three weeks after all credentials have been received. Following admission, the student receives a residence hall contract and agreement form. Students should submit the required \$100 residence hall deposit prior to May 1 to hold a place for the fall quarter. Students and parents will also receive an invitation and details about the pre-college orientation-registration program for entering students.

The Office of Admissions will waive the \$25 application fee for financially disadvantaged students, upon the written recommendation of the high school guidance counselor. It is expected that such students will qualify for significant amounts of need-based financial aid.

Early Admissions. The University does admit a limited number of students each year who have completed the junior year of high school. Such students are expected to display the necessary intellectual capacity and social maturity to be successful in college. The student is urged to make arrangements to secure the high school diploma by the beginning of the sophomore year of college study or secure the High School Equivalency Certificate by taking the General Education Development Test. Students interested in early admissions should contact the Office of Admissions.

Transfer Applicant. A person who has been or is registered for 12 or more quarter hours of coursework at a post-secondary institution of education applies as a transfer applicant.

A transfer applicant files (1) an application form accompanied by a \$25 nonrefundable fee and (2) a transcript from each of the post-secondary institutions in which he or she has been registered. Transcripts must be forwarded by the institutions directly to the Office of Admissions, at the request of the applicant.

Space is available in University residence halls for transfer students and housing contracts will be mailed by the Housing Office shortly after admission has been granted.

A student who is applying for transfer to the College of Fine Arts is required to submit a portfolio or to audition. Students should make their own arrangements by contacting the appropriate school in the College of Fine Arts.

Applicant from Another Country. A citizen of another country applies to the director of admissions if interested in undergraduate study; to the Office of Graduate Student Services if interested in graduate study.

The applicant files (1) an admissions application; (2) complete official transcripts and pertinent certificates for all secondary and post-secondary work; and (3) such evidence as may be required by the University concerning the applicant's ability to meet the financial obligations of a student in the United States.

All international students and refugees are required to take an English placement test administered by the Ohio Program of Intensive English (OPIE) at the time of initial registration. Exemption or placement in an English as a

Second Language (ESL) course will be determined by the results of this examination. If the scores indicate placement in an ESL course, registration for the ESL course is mandatory. Though the Test of English as a Foreign Language (TOEFL) is not required for admission, those applicants who have the TOEFL results should submit them.

Payment of the \$25 nonrefundable application fee should be made with the application.

An official translation must accompany transcripts and certificates which are not in English. *Do not submit documents for which there is only one copy; documents submitted in support of an application cannot be returned to the owner.*

Once admission is granted, the student receives a residence hall contract and an I-20 form to be used in securing a student visa. The housing contract is to be completed and returned to the University prior to arrival on campus.

Nondegree Student. If an applicant wishes to carry a limited number of courses at the University but is not interested in earning a degree, he or she may apply for admission as a nondegree student.

Such person may be approved for registration upon completion of a nondegree student application. If a transcript of previous coursework or any credential is necessary, the Office of Admissions will notify the student.

The University currently charges a \$15 nonrefundable application fee for nondegree students. This fee is not charged to *summer-only* nondegree students.

Reenrolling Applicant. If a person has previously attended as an undergraduate student but is not currently enrolled at Ohio University as a full-time or part-time student on the Athens and/or regional campuses and wishes to return as an undergraduate student, he or she applies as a reenrolling applicant. Any student who has been dropped from the University or whose records have a hold on them must have this cleared through the appropriate office before reenrollment can be processed.

A reenrolling applicant files with the Office of Admissions (1) an application form for reenrollment and (2) a transcript from each post-secondary institution in which he or she has been registered since last enrolled at Ohio University.

Space is available in University residence halls for reenrolling students and contracts will be mailed by the Housing Office shortly after admission has been granted.

Courses for High School Students. Ohio University offers college courses for students still enrolled in high school. Under this program a high school student may enroll in University courses during the academic year concurrently with high school enrollment or during the summer sessions. To be admitted to this program, the high school student must have the approval of the high school principal or guidance counselor for any study during the regular academic year. Further information about the program may be obtained from the Office of Admissions, Chubb Hall.

Deferred Admission. Students once admitted may request that their admission to the University be transferred to any future term. Students, both freshman and transfer, are guaranteed a place for the future term and are free to pursue a period of work, service, or travel before formally coming to campus for study. During this period, students are assured that their future enrollment at the University is secure.

ADMISSION REQUIREMENTS

To maximize chances for college success, Ohio University recommends that a freshman applicant's high school background include the following:

- 4 years of English, with an emphasis on composition
- 3 years of mathematics (algebra I, algebra II, plane geometry) one of which should be taken in the senior year
- 3 years of social studies
- 3 years of science
- 2 years of foreign language
- 1 year of visual and performing arts (art, band, chorus, music, orchestra, theater, etc.)

Freshman Applicant. Every resident of Ohio who is a high school graduate or who holds the High School Equivalency Certificate is considered eligible for admission to Ohio University.

Candidates for admission who are not residents of Ohio are encouraged to make application for admission. Out-of-state applicants can expect favorable action on their admission if they rank in the upper half of their graduating classes and if they present an ACT composite score of 21 or higher, or SAT scores that total 900 or higher.

Limited and Selective Admissions. Admission to the University does not guarantee admission to a specific program of study. Currently, limited and/or selective admission policies are in effect for athletic training, all business administration programs, engineering programs, College of Fine Arts programs, Honors Tutorial College, physical therapy, music, and all communication programs. Please consult the specific academic department or the Office of Admissions for details regarding limited and selective admissions policies.

Transfer Applicant. A student wishing to transfer from a regionally accredited college or university is required to have an accumulative grade-point average of 2.0 (on a scale where A is 4, B is 3, C is 2, and so forth) on all work attempted. A student wishing to transfer from an institution which does not have regional accreditation may be required to have a grade-point average substantially above a 2.0. In addition to the average, students wishing to enter the College of Fine Arts must meet the audition or portfolio requirement. Students wishing to enter the School of Nursing have special requirements. See the School of Nursing under the *College of Health and Human Services* section of this catalog. Transfer students to the College of Communication or the College of Business Administration must have completed 48 transferable quarter hours (32 semester hours) with an earned grade-point average of 2.5 to be eligible for admission. Transfer applicants to engineering degree programs must have an accumulative grade-point average of 2.0 if they have attended another four-year institution or a university-parallel program at a two-year institution; a grade-point average of 3.0 is required for transfer applicants who have attended a technical program. See the *College of Engineering and Technology* section of this catalog for specific requirements. Transfer applicants to one of the College of Communication's three schools (Interpersonal Communication, Journalism, or Telecommunications) must have at least 48 quarter hours (32 semester hours) of transferable credit and have an accumulative grade-point average of 2.5 or better.

Transfer Credit Evaluation and Recording of Transfer Credit. All credit earned at a regionally accredited college or university with a grade of C- or higher is accepted as transfer credit and can be used to satisfy

degree requirements in the same manner as credit earned at Ohio University. Remedial courses taken at the college or university level are not transferable. All grades for transfer credit are converted to a T grade symbol on the student's permanent academic record. The number of transferable quarter hours of credit is recorded on the academic record, but no quality points are recorded. Transfer students, therefore, enter Ohio University with no grade-point average on the Ohio University academic records.

Normally, courses in which a D grade was earned are not acceptable for transfer. Such a course will transfer, however, if (1) it was a specific prerequisite (as stated in the previous school's catalog) for a later course in the same department, and (2) a grade of C- or better was earned in that later course. Students meriting credit under this stipulation must contact the Office of Admissions, Chubb Hall, to receive credit for this coursework.

A student who has attended an institution which does not have regional accreditation may be required to have a grade-point average substantially above a 2.0 average and may have only part or in some cases none of his or her previously earned credit accepted. Any credit earned at such an institution is only accepted provisionally, and must be validated by the student's performance at Ohio University.

The Office of Admissions will send a tentative transfer credit evaluation report shortly after the student has been granted admission to the University.

Evaluation of Technical College Credits. A student who has completed an associate degree from a regents-approved Ohio college will have accepted for transfer credit all the general education coursework for which the degree was awarded if completed with a grade of C- or better. These credits will be accepted by all colleges of Ohio University toward meeting the minimum total credits required for a baccalaureate degree. The applicability of these transferred credits toward meeting the requirements of the program the prospective student wishes to enter can be determined in advance on request to the Office of Admissions. Requests should specify in which program the student is interested, and should be accompanied by a transcript of record.

In addition to policy described above, Ohio University has worked out certain credit evaluations with Ohio community and technical colleges which allow the technical college graduate to earn a bachelor's degree in approximately two years provided he or she continues in the corresponding academic area at the University. For a detailed description of these programs, contact the Office of Admissions.

Armed Forces Credit. Some courses provided by the Armed Forces are the equivalent of college courses and transfer credit may be obtained by presenting certificates or a diploma describing the training received. A *Guide* published by the American Council on Education is used to determine what credit might be granted. Blanket credit is not granted for military service.

Advanced Placement and Proficiency Examination Credit. Any entering student who has taken an examination provided by the Advanced Placement (AP) program of the College Entrance Examination Board may, by achieving an appropriate score (generally three or higher), receive Ohio University credit and placement.

Ohio University also participates in the College Level Examination Program (CLEP) sponsored by the College Entrance Examination Board. Subject to approval by the appropriate department in each case, the University will allow credit for satisfactory performance on the CLEP

subject-matter examinations, provided that the examinations are taken prior to formal enrollment at Ohio University. The University does not award any credit for scores achieved on the CLEP General Examinations.

Detailed information about both the AP and CLEP programs is available from high school guidance offices; from Ohio University; or by writing the College Entrance Examination Board, Box 592, Princeton, New Jersey 08540.

Non-Collegiate Training Programs. Some courses offered by business and professional organizations are considered the equivalent of college courses and transfer credit may be obtained by presenting transcripts or certificates of completion from the training program. A *Guide* published by the American Council on Education is used to determine what credit will be granted.

International Baccalaureate Degree. Ohio University recognizes the international baccalaureate (I.B.) for both admission and placement. Contact the undergraduate International Admissions Office for details.

ENTRANCE MEDICAL REQUIREMENTS

Entering students are not required to submit preenrollment physical examinations. A tuberculosis skin test administered by the University Medical Services is required at the time of the student's arrival on campus of all new international students and those international students returning after an absence of two or more years. All positive reactors must receive chest x-rays by the Health Service annually while at the University.

A major medical insurance plan, designed to supplement the care provided by the University's Health Center, is mandatory for each student carrying more than six credit hours, unless he or she submits evidence of comparable private coverage.

OHIO RESIDENCY

It is the responsibility of the student to report a change of address and/or residency from an Ohio resident to a non-Ohio resident at the Office of Student Records. If the student's residency has changed to an Ohio resident, he or she must file a residency petition with the Office of Admissions. No change of residency can be made until the residency petition has been approved by the University examiner. Questions concerning residency should be directed to the University examiner in the Office of Admissions.

The residency rules described below were adopted by the Ohio Board of Regents on December 29, 1977, and pursuant to Chapter 119. of the Revised Code, and under the authority conferred upon the Ohio Board of Regents by Section 3333.31 of the Revised Code. These rules are subject to change without notice by the Ohio Board of Regents or the Ohio General Assembly.

A. Intent and Authority

1. It is the intent of the Ohio Board of Regents in promulgating this rule to exclude from treatment as residents, as that term is applied here, those persons who are present in the State of Ohio primarily for the purpose of receiving the benefit of a state-supported education while insuring that the same benefit is conferred on all bona fide domiciliaries of this state whose permanent residence and legal citizenship is in Ohio, and whose actual source of financial support is subject to Ohio taxation.

2. This rule is adopted pursuant to Chapter 119. of

the Revised Code, and under the authority conferred upon the Ohio Board of Regents by Section 3333.31 of the Revised Code.

B. For Purposes of This Rule:

1. A "resident of Ohio for all other legal purposes" shall mean any person who maintains a twelve-month place or places of residence in Ohio, who is qualified as a resident to vote in Ohio and receive state welfare benefits, and who may be subjected to tax liability under Section 5747.02 of the revised code; provided such person has not, within the time prescribed by this rule, declared himself or herself to be or allowed himself or herself to remain a resident of any other state or nation for any of these or other purposes.

2. "Financial support" as used in this rule, shall not include grants, scholarships, and awards from persons or entities which are not related to the recipient.

3. An "institution of higher education" as used in this rule shall mean any university, community college, technical institute or college, general and technical college, medical college, or private medical or dental college which receives a direct subsidy from the State of Ohio.

C. General Residency for Subsidy and Tuition Surcharge Purposes

The following persons shall be classified as residents of the State of Ohio for subsidy and tuition surcharge purposes:

1. Dependent students, at least one of whose parents or legal guardian has been a resident of the State of Ohio for all other legal purposes for twelve consecutive months or more immediately preceding the enrollment of such student in an institution of higher education.

2. Persons who have resided in Ohio for all other legal purposes for at least twelve consecutive months immediately preceding their enrollment in an institution of higher education and who are not receiving, and have not directly or indirectly received in the preceding twelve consecutive months, financial support from persons or entities who are not residents of Ohio for all other legal purposes.

3. Persons who are living and are gainfully employed on a full-time or part-time and self-sustaining basis in Ohio and who are pursuing a part-time program of instruction at an institution of higher education.

D. Specific Exceptions and Circumstances

1. A person on active duty status in the United States military service who is stationed and resides in Ohio and his or her dependents shall be considered residents of Ohio for these purposes.

2. A person who enters and currently remains upon active duty status in the United States military service while a resident of Ohio for all other legal purposes and his or her dependents shall be considered residents of Ohio for these purposes as long as Ohio remains the state of such person's domicile.

3. Any alien holding an immigration visa or classified as a political refugee shall be considered a resident of the State of Ohio for state subsidy and tuition surcharge purposes in the same manner as any other student.

4. No person holding a student or other temporary visa shall be eligible for Ohio residency for these purposes.

5. A dependent person classified as a resident of Ohio for these purposes shall continue to be considered a resident during continuous full-time enrollment and until his or her completion of any one academic degree program.

6. In determining residency of a dependent student, removal of the student's parents or legal guardian from Ohio shall not, during a period of twelve months following such removal, constitute relinquishment of Ohio residency status otherwise established under paragraph (C) (1) of this rule.

7. Any person once classified as a non-resident, upon the completion of twelve consecutive months of residency in Ohio for all other legal purposes, must apply to the institution he or she attends for reclassification as a resident of Ohio for these purposes if such person in fact wants to be reclassified as a resident. Should such person present clear and convincing proof that no part of his or her financial support is or in the preceding twelve consecutive months has been provided directly or indirectly by persons or entities who are not residents of Ohio for all other legal purposes, such person shall be reclassified as a resident. Evidentiary determinations under this rule shall be made by the institution which may require, among other things, the submission of information regarding the sources of a student's actual financial support to that end.

8. Any reclassification of a person who was once classified as a non-resident for these purposes shall have prospective application only from the date of such reclassification.

9. A person who is transferred by his or her employer beyond the territorial limits of the fifty states of the United States and the District of Columbia while a resident of Ohio for all other legal purposes and his or her dependents shall be considered residents of Ohio for these purposes as long as Ohio remains the state of such person's domicile.

10. A person who has been employed as a migrant worker in the State of Ohio and his or her dependents shall be considered a resident for these purposes provided such person has worked in Ohio at least four months during each of the three years preceding the proposed enrollment.

E. Procedures

Institutions of higher education charged with reporting student enrollment to the Ohio Board of Regents for state subsidy purposes and assessing the tuition surcharge shall provide individual students with a fair and adequate opportunity to present proof of their Ohio residency for purposes of this rule. Such institution may require the submission of affidavits and other documentary evidence which it may deem necessary to a full and complete determination under this rule.

PRECOLLEGE ORIENTATION AND REGISTRATION

Ohio University conducts a precollege orientation and registration program for new fall quarter students during the summer months.

Fall quarter freshmen and transfer students are expected to visit the campus during July or August for a two-day session of orientation, academic advisement, and course registration. Parents are encouraged to attend these sessions in which they will have an opportunity to discuss many of the concerns they may have about the college experience.

Orientation and registration programs for new students entering the University other than fall quarter will be conducted immediately prior to the beginning of each quarter.

Detailed information concerning student orientation and registration is sent to all admitted students from the University College Office.

REGISTRATION FEES

Undergraduate registration fees are payable at the Cashier's Office* prior to the opening of classes and in accordance with instructions issued with registration materials. Checks and money orders should be made payable to Ohio University in the exact amount of the fees. It is important that the student retain all fee receipts.

Payment of fees owed is a prerequisite to official enrollment, and all students should have sufficient funds to cover these expenses. Post-dated checks will not be accepted. Checks issued to the University and not paid on presentation to the bank will automatically cancel any receipts given and result in the assessment of penalties.

Ohio University reserves the right to make, without prior notice, any fee adjustments that may become necessary.

*Regional campus students pay fees at the campus where they are registered. For graduate fees see the Graduate Bulletin.

REFUND OF FEES

The official University policy on the refund of registration fees is: (1) Official withdrawal from the University prior to the first day of classes entitles the student to a refund of 100 percent. (2) Withdrawal from the University during the first 14 days of the quarter (see the academic calendar) entitles the student to a refund of 80 percent (cost of 20 percent) if fees were paid in full. Students on the Monthly Payment Plan will have incurred a charge of 20 percent of registration fees with this being subtracted from their registration payments to determine refundable amount. (3) Withdrawal from the University after the first 14 days of classes entitles the student to no refund. (4) Any student withdrawing from the University while owing the University money is considered to be indebted to the University for that amount.

Students dropping hours by change order prior to or during the first 14 days of the quarter, when such changes result in a reduction of fees, are entitled to receive a 100 percent refund of the reduction. Changes made after the 14th day of the quarter will result in no refund.

Refunds are issued 30 days after the date of withdrawal from the University.

Questions about the above items should be referred to the Office of Registration.

MONTHLY PAYMENT PLAN

A monthly payment plan is available to full-time students (undergraduate over ten hours; graduate over eight hours) on the Athens campus. The plan equalizes the academic year's fees into nine monthly payments with the first payment due on August 15.

The only charge to participate on the monthly payment plan is the \$30 nonrefundable application fee. This plan is not a loan program and there is no interest charge.

The refund procedure logic is on the basis that all fees for the quarter have been paid. The refundable amount will be adjusted to recognize any unpaid monthly payments for the current quarter.

Contact the Cashier's Office, Chubb Hall, to obtain an application for the Monthly Payment Plan.

SCHEDULE OF UNDERGRADUATE FEES*

Instructional Fees (per quarter)

	Resident of Ohio	Nonresident
Comprehensive fee for load of 11 to 20 hours inclusive		
Athens campus	\$639.00	\$1,286.00
Regional campuses	515.00	1,162.00
Ironton Branch and Portsmouth Resident Credit Center	475.00	505.00

Includes the instruction fee — the general fee, and other special services (such as health, library, and testing) and course and laboratory fees. Excludes special-course fees for instruction as in music and bowling, which are listed in the quarterly class schedule.

Extra fee for each quarter hour in excess of 20 hours

Athens campus	\$ 31.00	\$ 63.00
Regional campuses	23.00	52.00
Ironton Branch and Portsmouth Resident Credit Center	23.00	23.00

Fee for each hour for load of 1 to 10 hours, inclusive

Athens campus	\$ 63.00	\$127.00
Regional campuses	48.00	106.00
Ironton Branch and Portsmouth Resident Credit Center	44.00	47.00

Auditors pay fees in full as above.

Lifelong Learning — Independent Study

Independent Study courses, each quarter hour	\$ 30.00
Independent Study projects, each quarter hour	35.00
Course Credit by Examination, each quarter hour	16.00
External Student Status	50.00
External Student program for the incarcerated, compre- hensive fee, per quarter	600.00
Adult Learning service per assessment	63.00
Administration fee	35.00

Miscellaneous Fees

Admission application filing fee (nonreturnable)	\$ 25.00
Special student application fee (nonreturnable)	15.00
Reclassification fee from special student to regular student status	10.00
Change of class schedule	4.00
Duplicate official forms, fee receipts, grade reports, etc.	2.00
Course Credit by Examination, each quarter hour	16.00
Graduate application for degree	
Associate	\$ 8.00
Bachelor's	16.00
Master's	23.00
Doctoral	50.00
Reapplication	5.00

*Subject to change at the discretion of the University.

Health insurance, annual premium	67.50
Late registration and/or payment	20.00
Returned check service charge (accumulative)	5.00
Transcript of record	2.00
Placement registration fee	12.00

Registration and Procedures

REGISTRATION

Details concerning the registration procedure are printed each quarter in the Schedule of Classes and may be obtained at the Office of Registration in advance of each registration.

In accordance with regulations a student currently in attendance at the University may preregister for a subsequent quarter.

New and former undergraduate students will receive registration information by mail with other orientation material.

Student Load

All regular full-time students, including those on probation, will usually carry a normal load of 16-20 quarter hours.

Students who schedule fewer than 11 credit hours (12 for financial aid recipients) will be considered part-time for the effective quarter.

Auditing and Visiting Privilege

Courses to be audited must be marked "audit" on registration forms. Questions about auditing should be referred to the student's college office. Changes from audit to credit or from credit to audit are made by change order during the first 14 calendar days of the quarter.

With the permission of the instructor, a full-time student has the privilege of visiting classes in which he or she is not registered.

Classification of Students

A student who has been admitted to the University and who expects to pursue a degree course is given rank according to the number of quarter hours earned: freshman, 0-44; sophomore, 45-89; junior, 90-134; and senior 135 and over.

Graduate Study as a Senior

A student who is within nine hours of completing all requirements for the bachelor's degree at Ohio University and who has an overall grade-point average of at least 2.5 may take courses carrying graduate credit, provided the requirements for admission are otherwise met and the written recommendation of the dean of the college, the graduate chairman of the major department, and the ap-

proval of the director of graduate admissions are secured. This privilege also may be extended to a well-qualified senior of another university who has nine or fewer hours to complete for the bachelor's degree. *Request for this privilege should be made in advance of registration through the Office of Graduate Student Services.* A \$10 application fee is charged for this privilege.

CHANGE PROCEDURES

Change of Class Schedule

A student who finds it necessary to add a course, drop a course, or correct his or her registration secures a change order in the office of the dean of the college in which he or she is enrolled. A fee of \$4 is charged for each change order processed after the 14th calendar day of the quarter.

Adds. A course may be added only during the first 14 calendar days of the quarter and only with the permission of the instructor or departmental representative designated by the instructor. The departmental representative or the instructor approves the adding of a course by initialing the change order. After securing the approval, the student presents the change order form for the dean's approval. For information concerning fee changes, see the Schedule of Undergraduate Fees in this catalog.

Drops. Students may drop any course through the fifth week (defined for the purpose of this policy as the 35th calendar day) of a term. The completed change order must be turned in by the student to the appropriate academic dean's office on or before the fifth week. After the end of the fifth week and before the last class day of the quarter, a student may petition his or her dean in writing requesting to drop under special circumstances. Earning a low grade in the course is not to be considered such a circumstance. A student who drops a course during the first two weeks (first 14 calendar days) will have no record of that course appear on the transcript.

For any student who drops a course after the 14th day of the quarter the instructor will assign a grade of WP or WF, indicating that the student was performing work considered passing (WP) or failing (WF) at the time the course was dropped. This grade will be awarded at the end of the quarter, at which time the name of each student who has dropped a course will appear on the grade sheet.

Students dropping hours by change order prior to or during the first 14 days of the quarter, when such changes result in a reduction of fees, are entitled to receive a 100 percent refund of the reduction. Changes made after the 14th day of the quarter will result in no refund.

However, if a student is receiving financial assistance, the change in enrollment status may result in the student's having to repay those programs from which he or she received student financial assistance.

A student denied permission to drop a course may appeal the decision through the appropriate grievance procedure (See the Student Handbook).

Change of Student Personal Information

All changes of student personal data must be reported to the Office of Registration, Chubb Hall. Forms are available in the Office of Registration or the office of the student's dean. Changes of name, social security number, and/or birth date must have a document verifying the correct information at the time the request is made.

Forms for reporting a change of home or Athens address are available in the Office of Registration. *The student is responsible for any University office communication sent him or her at the last address reported to the Office of Registration, Chubb Hall.*

Change of College

Application for transfer from one degree college to another is made in the office of the dean of the college in which the student is enrolled. The change must be signed by the two deans concerned and be presented to the Office of Registration, Chubb Hall, within the first 14 days of the quarter or the student remains enrolled in the initial college. A student must fulfill degree requirements for the college to which he or she transfers.

LATE REGISTRATION AND LATE PAYMENT POLICY

Unless in the judgment of the registrar a student's registration has been delayed due to the convenience of the University, a \$20 *late registration fee* will be assessed each late-registering student beginning with the 15th calendar day of each quarter.

A *late payment fee* would normally not be applicable since payment is a prerequisite to registration. However, in addition to other service charges, a \$20 *late payment fee* will be assessed by the Bursar's Office on all checks returned by a bank after the payment deadline has passed.

WITHDRAWAL FROM THE UNIVERSITY

Application for withdrawal is made on a withdrawal form obtained in the office of the dean of the college in which the student is enrolled. When the request for the withdrawal has been approved by the dean of the college, the withdrawal is referred to the Office of Registration, Chubb Hall, which grants an official withdrawal after it has been determined that all obligations to the University have been met. A refund of registration fees is made according to regulations under the section *Refund of Fees*.

If a student is receiving financial assistance the change in enrollment status may result in the student's having to repay those programs from which he or she received student financial assistance.

TRANSCRIPTS

A copy of a student's record is issued by the Office of Student Records, Chubb Hall, as an official transcript. Transcripts are made only upon written request, with a \$2 charge for each copy. The transcript carries a statement of good standing except when a student has been dropped from the University because of poor scholarship, non-payment of fees, or unsatisfactory conduct. A student on scholastic probation has such status shown on the transcript.

REPLACEMENT DIPLOMA

A notarized affidavit, attesting that the original diploma has been lost or destroyed, or a copy of a court order verifying a legal name change (other than change of marital status), must be filed with the Office of Student Records at Ohio University. In case of a legal name change the original diploma must be returned.

Each affidavit requesting a replacement diploma must be accompanied by a \$10 fee.

The replacement diploma will carry current titles and signatures of University officers. It will carry the notation "official replacement."

Credit and Grading

CREDIT AND FINAL EXAMINATIONS

All credit is designated in quarter hours. Normally, a quarter hour is the equivalent of one recitation or two or more laboratory periods a week throughout a quarter.

The final examinations are held during the last week of a session and all students are required to take the examinations according to the schedule issued by the Scheduling Office, that is, if a final examination is required for that course.

The final examination for honors work must be taken before the opening of the regular examination period. For information concerning honors work, refer to Departmental Honors Program.

GRADING SYSTEM AND REPORTS

At the close of a session or upon the completion of a course an instructor reports a letter grade indicating the quality of a student's work in the course. Once grades are submitted they are final and cannot be changed unless evidence of error can be presented. *Grades cannot be changed by arranging to do additional work.* Points are assigned for each quarter hour of credit earned, according to the following grading system:

A	.....4.00	B-	.....2.67	D+	.....1.33
A-	.....3.67	C+	.....2.33	D	.....1.00
B+	.....3.33	C	.....2.00	D-	.....0.67
B	.....3.00	C-	.....1.67	F	.....0.00

CR . . . In addition to the letter grades a report of credit may be made. This is credit without a grade. Credit is added to the hours earned, but not added to the hours attempted for point-hour calculation. Credit is to be used for certain courses and only by prior approval of the Curriculum Council or in certain special cases by the dean of the college.

PR . . . Progress. The PR is awarded only in graduate courses and undergraduate courses specifically designated by the department with the approval of the college dean. It indicates the student has made progress in the course in which he or she is registered but has not finished the work required for releasing a letter grade. Progress may extend longer than one quarter. It is not calculated in the grade-point average.

I . . . The student has not finished the work required to receive a grade. It is not counted in the grade-point average. Unless it is changed within the first six weeks of the next quarter enrolled, the I converts to F (an extension of time may be requested to run to the end of the quarter).

When the student applies for graduation any Incomplete grades on his or her record will be calculated as F grades for purposes of determining eligibility for graduation. If the I is not completed within six weeks after graduation, the grade will convert permanently to F.

WP/WF . . . Designation for a course dropped after the 14th day of the quarter.

The above four grades do not count in the grade-point average.

Other reports which will appear on the student's grade slip but which are not assigned by a faculty member:

AU . . . Audit. A student registering for *Audit* is expected to attend classes consistent with the instructor's attendance policy. Failure to do so will result in removal of the audit from the student's record. If this action results in a change of fees, the official University policy of refund of registration fees will be applied. Audited courses are not computed in the grade-point average or hours earned.

I* . . . Administrative Incomplete. Given to a student who initially registers for a course but does not officially drop that course by change order. The I* is given by the Office of Student Records and may be removed in accordance with rules established by the student's college. The I* may be the result of a faculty member assigning a grade for which the course is not coded as legitimate. Until removed, an administrative incomplete will be computed as an F in the calculation of the grade-point average.

NR . . . No Report. The instructor left the grade blank on the grade report. Grades were turned in too late to be processed.

P . . . Conversion of grades A through D- under the pass/fail option. The fail (F) grade counts in the grade-point average the same as any F grade.

A course for which graduation credit is not allowed or a course which has been repeated will appear on the transcript with double asterisks (**) on the same line as the course. An explanation at the bottom of the transcript will state:

**Not counted toward graduation. Hrs. & Pts.
not included in totals for scholastic average.

This action occurs only after a form has been properly submitted by the student and approved by his or her college office.

Repeating a Course

When a course is repeated, both grades continue to be used to determine the accumulative point-hour ratio until the student applies for and completes a repeated-course form, available in the office of the dean. A course may not be repeated for the purpose of raising the grade-point average after completion of higher-level coursework in the same subject area. Note also that courses taken at Ohio University and repeated at another school do not result in deduction of the first grade earned.

Pass/Fail Option

The pass/fail option is designed to encourage students to explore areas of study which they might otherwise hesitate to enter. It must be initiated by the student.

To be eligible for the pass/fail option, a student must have earned an average of 2.5 or better for his or her latest quarter of full-time enrollment, or have an accumulative average of 2.0 or better. First-quarter freshmen will be considered as having met the above requirement.

The pass/fail option is subject to the following restrictions: (1) Students may complete up to 20 quarter hours under this option; (2) A student may take only one course per quarter by pass/fail; and (3) No course taken pass/fail may be used to fulfill any graduation requirement (college, school, or departmental) other than the total hours requirement. For example, courses taken pass/fail cannot be used to satisfy distribution requirements, 90-hour requirements of courses above a specified level, a specific course established as a requirement for majors in a departmental major program, or any other such requirements. (Note: Restriction (3) does not apply to pass/fail courses taken prior to September, 1976.) (4) The student

must complete the Pass/Fail Application Form and turn it in to his or her dean's office by the 14th calendar day of the quarter. No change can be made after this time. (5) The professor is not to know who elects his or her course on the pass/fail option. A grade will be turned in at the regular grade-processing time and will be converted to a P or F on the transcript. The grade cannot be retrieved.

Point-Hour Ratio (Grade-Point Average)

The basis for determining scholastic standing is the point-hour ratio or grade-point average (g.p.a.). It is obtained by dividing the total number of points earned by the total number of quarter hours of credit attempted.

Transfer Credit Evaluation and Recording of Transfer Credit

For details of credit evaluation for all prospective students, see the *Admission and Fees* section of this catalog.

Evaluation of Technical College Credits

For details of credit evaluation for all prospective students, see the *Admission and Fees* section of this catalog.

Continuing Education Unit

Participants in designated noncredit courses may be awarded continuing education units (CEUs). The CEU is a measurement (one unit per ten class 1-1 contact hours) nationally recognized by business, industry, and professional organizations for an individual's efforts toward professional growth. Permanent records of CEUs earned are kept in the Office of Lifelong Learning, which, upon request, will provide a copy of an individual's record.

Dean's List

The Dean's List, compiled at the close of each quarter, includes the names of all students who have point-hour ratios of at least 3.3 on a minimum of 16 quarter hours of credit earned, including 12 hours attempted for letter grades.

PROBATION AND DROP REGULATIONS

Each student's record is reviewed at the close of each quarter. If a student's accumulative record shows a grade-point deficiency, he or she is subject to being placed on probation or dropped from the University. The point-hour ratio is obtained by dividing the total number of grade points earned by the total hours attempted. The entire record, including each grade in each course attempted, is used to determine the student's probation status.

The extent to which a student's record is below a point-hour ratio of 2.0 (C) determines whether he or she will be dropped, placed on probation, or continued on probation. The deficiency points are determined by multiplying the total number of hours attempted by two and subtracting from this all points earned. For example, if a student has attempted 40 hours and has earned 65 points the deficiency is 15. That is, 40×2.0 (the point-hour ratio required for graduation) equals 80; 80 minus 65 points earned equals 15 deficiency points.

Probation

A student who has enrolled in fewer than 45 hours is placed on probation when the grade-point deficiency is greater than 12 grade points. The student who has enrolled in 45 or more hours is placed on probation if he or she has less than a 2.0 average (one or more deficiency points).

Probation Removal

Probation is removed if a student on probation who has enrolled in fewer than 45 hours reduces the grade-point deficiency to 12 or fewer grade points. For the student who has enrolled in 45 or more hours, probation is removed when the point deficiency is reduced to zero.

Continuance on Probation

A student who has been on probation for one quarter may be continued on probation for one additional quarter if the grade-point deficiency has not increased and he or she is not eligible to be removed from probation. However, at the close of this additional quarter the student must be eligible to be removed from probation or he or she will be dropped from the University.

Dropped from the University

Any student whose grade-point deficiency at the close of any quarter exceeds the number of hours attempted in that quarter will be dropped from the University. In other words, if a student receives a g.p.a. of less than 1.0 in any one quarter, he or she will be dropped. A student may be dropped even though he or she has not previously been on probation. A student on probation is dropped from the University if the grade-point deficiency has increased and he or she is not eligible to be removed from probation.

Normally, a petition for reinstatement will not be considered until 12 months after the student was dropped. The student presents the petition to the dean of his or her college. Only extraordinary circumstances will prompt the committee to consider a petition for second reinstatement, and then not until 24 months after the student was dropped.

A student who is dropped from the University may not enroll for courses on the Athens campus, on a regional campus, or in correspondence or lifelong learning courses conducted by Ohio University until reinstated. Work taken at other institutions while on drop status at Ohio University will not be accepted by Ohio University without prior approval of the dean of the student's college.

Academic Misconduct

Academic misconduct includes cases of cheating and plagiarism. Cheating implies dishonesty or deception in fulfilling academic requirements. A faculty member has the authority to grant a failing grade in cases of academic misconduct as well as referring the case to the director of judiciaries. The director of judiciaries, the University Hearing Board, and the University Appeal Board have the authority to take formal action against a student including, but not limited to, suspension or dismissal from the University. However, the director of judiciaries, the University Hearing Board, and the University Appeal Board have no authority to modify a grade given by a faculty member.

Dishonesty occurs in instances of furnishing false information to the University by forgery, alteration, or misuse of, among other things, University documents or records, furnishing the University a written record or oral

false statement, or furnishing false identification to a University official.

Plagiarism can take many forms, but in essence it involves the presentation of some other person's work as if it were the work of the presenter. This kind of deception has no place in the academic world.

Plagiarism, a form of academic misconduct, will not be tolerated within the Ohio University community. Whenever plagiarism takes place, as determined by the judgment of a faculty member, or by the procedures of the Office of University Judiciaries, serious action will be taken against the student committing plagiarism. Such action may be failure of work undertaken; failure of the course; censure by the faculty member, department, or college involved; and/or formal action by the Office of University Judiciaries, which can include suspension or dismissal from the University.

Whenever formal action is taken with respect to plagiarism, the student(s) involved, the faculty member, the department chairman, and the student's dean should be notified of the action.

It is appropriate for each faculty member to point out each quarter, among the several introductory items of business related to the course, the nature of plagiarism and the range of punishments pertaining to such an offense.

If a student's course grade is lowered by an instructor who has accused the student of plagiarism, and if the student wishes to appeal this grade, he or she may follow the usual appeal route through the instructor, chairperson, and dean. If satisfaction is not achieved through this process, the appeal may be taken to the Student Grievance Board.

CLASS ATTENDANCE POLICY

Each instructor will state his or her policy during the first week of classes each quarter.

Instructor's Attendance Reports

A student who misses the first two class meetings of a course for which he or she is registered may be denied permission to remain in the class. The student who has missed the first two class meetings should verify his or her status in the class with the instructor. The instructor has the option of dropping or retaining the student. Students not retained because of missing the first two days must process a change order to adjust their schedules. Failure to process the change order can result in an F or I* grade.

Instructors are encouraged to report to the office of the dean of the appropriate college the names of students who are frequently absent. This enables the staff to investigate such cases and to determine what assistance these students may need in dealing with problems outside the classroom.

Notification of Causes of Absence

Under certain conditions a notification of absence enabling a student to make up work may be obtained from the appropriate office as indicated below. The following rules apply:

1. When a student has participated in an authorized University activity, such as a departmental trip, music or debate activity, ROTC function, or athletic trip, the notification should be issued by the sponsoring office.
2. A student absent from class due to hospitalization as an inpatient in O'Bleness Memorial Hospital is

NOT issued a notification of class absence. However, the student may request that the instructors call the Health Center for verification of the fact of the student's hospitalization on certain days.

3. A student who receives medical or dental care as an outpatient at the Hudson Health Center will not be issued a notification of class absence. However, the student may request the instructors to call the Health Center (the attending physician, if possible) for verification of receipt of outpatient care on a given day. It is assumed that students visiting the Health Center as outpatients will do so, whenever possible, without missing classes.

4. A student who receives medical care from health care personnel or facilities other than the University Medical Services is expected to present the instructors of classes necessarily missed for this reason with verification of the date(s) such care was received from the attending physician or dentist.

Graduation Requirements

APPLICATION

A student who is a candidate for graduation must make application in the Office of Student Records and pay the application fee no later than the deadline listed in the academic calendar for the quarter in which graduation is planned. This application initiates the process which informs the student's college to check fulfillment of degree requirements. The process culminates with the reflection of the college, major, degree, and the date of granting degree on the student's permanent (academic) record. The application fee for a bachelor's degree is \$16 and for an associate degree, \$8.

If an applicant fails to meet the requirements for graduation, he or she may reapply for the quarter in which completion of the requirement is planned. The fee for reapplication is \$5.

Students applying for a bachelor's degree must have a minimum of 192 quarter hours of credit with all college requirements met. The associate degree requires a minimum of 96 quarter hours.

SCHOLASTIC AVERAGE

To meet the minimum standards for graduation from Ohio University, a student must have a point-hour ratio of 2.0 (C) on all hours attempted. The need for this 2.0 average applies to the student's total record and to the total major or equivalent as determined within the college.

MAJOR AREAS OF STUDY

Requirements for majors and fields of concentration are outlined by the individual colleges. A transfer student who has completed most or all of the courses in a major area of study at another institution may be required to satisfy the departments concerned that Ohio University academic standards in that area have been met.

MINOR AREAS OF STUDY

While most programs do not require the completion of minor areas of concentration, a variety of minors is offered by several departments. In many cases, these minors may be completed even when the student is not enrolled in the college which offers that minor. Requirements for the available minors are explained in the *Colleges and Curricula* section which follows.

DEVELOPMENTAL COURSE CREDIT

No more than eight credit hours earned in developmental courses may be applied toward the total hours required for graduation. Developmental courses shall be so designated and publicized by the curricular committees of the appropriate academic units.

RESIDENCE REQUIREMENTS FOR GRADUATION

Bachelor's Degree

Residence credit is defined as credit earned by regular enrollment at Ohio University on the Athens campus, on any of the regional campuses, by any of the approved programs abroad, by any approved student teaching, by Independent Study and Course Credit by Examination arranged through Ohio University's Independent Study Program, by degree credit earned through continuing education, or by any combination of these methods.

The minimum requirement for students who complete fewer than 96 quarter hours at Ohio University is the final year (three quarters) with 48 hours of credit. For a student who completes 96 or more quarter hours of Ohio University credit, *the final quarter shall be in residence* as defined by residence credit in the above paragraph.

If a student begins graduate study before completion of all requirements for a bachelor's degree, residence for the bachelor's degree will be reduced by as many weeks as credit hours of graduate work completed. The number of weeks subtracted will be credited toward the residence requirement for a master's degree if the credit is acceptable in the program approved for graduate work toward a degree. Residence used for meeting requirements for one or more bachelor's degrees may not also be used for meeting the residence requirements for a master's degree.

The residence regulations apply to a student who has been approved for graduation *in absentia* and is completing the last year in an accredited institution, except that the regulations apply to residence before the student leaves the University.

A student should make certain particular residence requirements of his or her college have also been met.

Associate Degree

A student seeking an associate degree must earn at least 30 quarter hours of residence credit at Ohio University. Moreover, students who complete fewer than 60 quarter hours of Ohio University credit must earn at least eight of the final 15 hours in residence as defined below. If the degree applicant has not earned Ohio University credit within two years of the quarter in which application is made, he or she must earn Ohio University credit during the quarter in which the associate degree is earned.

Residence credit is defined as credit earned by regular enrollment at any Ohio University campus, by any of the approved programs abroad, by any approved student teaching, by Independent Study through Correspondence or Course Credit by Examination arranged through Ohio University's Office of Lifelong Learning, by degree credit earned through continuing education, or by any combination of these.

Problems related to the residence requirements should

be discussed with the student's academic dean. In certain cases exceptions to the residence requirements may be made.

IN ABSENTIA

In absentia permission is obtained in writing from the dean of the college in which the student is enrolled. To obtain the bachelor's degree a student who has been approved for the senior-*in-absentia* privilege in an approved professional school must have completed a full year's work in the professional school of the quality prescribed for the bachelor's degree at Ohio University and be eligible for advancement without condition to the second year. The official transcript from the school must be submitted to the Office of Admissions, Chubb Hall, Ohio University, before the degree-conferring date.

The *in absentia* privilege does not apply to graduate degree programs.

BULLETIN OF ENTRY

The published degree and major requirements stated herein remain in effect for a student entering under this bulletin for a period of five years from the date of first registration in the University. If the student does not complete all degree requirements within five years, the requirements of the current bulletin take effect.

Changes in either major or nonmajor requirements made necessary by altered or discontinued courses or by requirements imposed by external accrediting or certification agencies will be resolved on an individual basis by the dean of the student's degree college. Wherever it is possible, new requirements will be implemented with a beginning class or upon the expiration of the appropriate time limit.

A transfer student is governed by the same regulations, except that the number of years in which to complete the degree requirements is reduced by the number of years of transferred work.

GRADUATION WITH HONORS

A candidate for the bachelor's degree who is graduated with a point-hour ratio of 3.0 up to 3.50 on all hours attempted is distinguished on the commencement program by the notation "with honor," with 3.50 or above, by the notation "with high honor."

A candidate must complete a minimum of 48 hours of letter grades in residency at Ohio University to be eligible for honors.

A candidate who has successfully completed a program of study with honors is distinguished in the commencement program and on the diploma with the appropriate notation.

GRANTING OF DEGREES AND COMMENCEMENT

Degrees are granted at the close of each quarter. The annual commencement is held at the close of the spring quarter. Candidates for spring quarter graduation and recipients of degrees at the preceding summer, fall, and winter quarters are invited to attend the exercises.

A SECOND BACHELOR'S DEGREE

A student who desires two bachelor's degrees may meet the requirements for them either simultaneously or successively:

1. If a student desires to complete the requirements for the two degrees conferred on the same date, he or

she must meet the particular subject requirements for both degrees; earn a minimum of 48 approved quarter hours beyond the minimum required for one degree with the requisite scholastic average, both on Ohio University work and credit that has been transferred from another school, and must have completed a total of 13 quarters of college work or its equivalent, with a minimum of five quarters of residence, or the equivalent, at Ohio University. When the two degrees are offered by different colleges, the student must register in both colleges and meet the college residency requirement the quarter in which the degrees are to be conferred.

2. If a student has met the requirements for two degrees as indicated above and desires to have the degrees conferred in successive quarters, he or she may do so without further credit or residence. For example, one degree may be conferred at the end of one quarter and application made for the second degree in a subsequent quarter.

3. If a student desires to take a second bachelor's degree after receiving the first, he or she must complete the subject requirements for the second bachelor's degree, earn a minimum of 48 acceptable quarter hours beyond the requirements for the first degree with the requisite scholastic average, and meet the residency requirement in the college offering the second degree. (See individual college requirements under *Colleges and Curricula*.)

COURSE CREDIT BY EXAMINATION

Course Credit by Examination is designed for students who wish to demonstrate proficiency in a particular Ohio University course. A student may take up to six months after enrolling for credit by examination to prepare for the examination. An information sheet describing the nature of the examination is used by the student as a guide in preparing for it. Regular Ohio University credit is granted for a grade of D- or better with the pass/fail option available in accordance with the University regulations for this option. A failed CCE course will appear on the transcript as an F, in the regular manner. In order for a student to retake a course failed in this program, special permission must be obtained from the office of the student's dean. The grade received is used in computing the point-hour ratio of Ohio University students, but enrollment in Course Credit by Examination does not affect the quarterly course load.

Ohio University students must obtain permission from their academic deans to enroll in the program. Others are not required to have permission, but if they plan to transfer the credit to another institution they should ascertain in advance if it will be accepted.

Registration and arrangements for the examinations are made in the Office of Independent Study, Tupper Hall 302. The fee is \$16 per quarter hour. Complete information and a listing of the courses regularly available can be obtained at this office.

GENERAL EDUCATION REQUIREMENT*

An educated person needs certain intellectual skills in order to participate effectively in society. These include: (1) the ability to communicate effectively through the written word and the ability to use quantitative or symbolic reasoning; (2) broad knowledge of the major fields of learning; and (3) a capacity for evaluation and synthesis. To meet these objectives, Ohio University has instituted a

*Honors Tutorial College students and students enrolled in two-year associate degree technical programs are exempted from meeting University General Education requirements.

three-tier General Education requirement to be met prior to graduation by all students according to the following schedule.

Tier I: Quantitative Skills and English Composition.

Tier II: Breadth of Knowledge.

Tier III: Synthesis.

Tier I: Quantitative Skills

All students entering Ohio University as freshmen in September, 1980, and in subsequent years must demonstrate an acceptable level of quantitative skills. Examinations administered by Ohio University will determine whether a student must take a basic quantitative skills course (MATH 101) prior to enrollment in one of the following Tier I courses:

CS 220	MATH 120, 121 (elementary education majors only)
ET 180	PHIL 120
MATH 113, 117, 118, 151	PSY 121

These courses are marked in the *Courses of Instruction* section of this catalog by the designation (1M) following the title and credit hours.

If a student is able to demonstrate by examination exceptional quantitative skills, he or she may be exempted from the Tier I requirement. This level of exceptional skill is assumed to be equivalent to passing a course at the level of MATH 163A or higher.

Tier I: English Composition

All students entering Ohio University as freshmen must demonstrate an acceptable level of writing skill.

Exams administered by Ohio University will determine whether a student should take a basic writing skills course (ENG 150) prior to enrollment in either ENG 151, 152, or 153. These courses are marked in the *Courses of Instruction* section of this catalog by the designation (1E) following the title and credit hours.

An advanced composition course is also required. Students unable to demonstrate advanced writing proficiency at the junior level must take, prior to graduation, an approved advanced writing course such as:

ANTH 356J	HIST 301J or 376J or 396J
CA 360J	HLTH 370J
EDCI 331J	IT 370J
ENG 305J or 308J	JOUR 441J
FILM 344J	MGT 325J
GEOG 375J	MUS 320J

These courses are marked in the *Courses of Instruction* section of this catalog by the designation (1J) following the title and credit hours.

The requirements faced by transfer students are determined by point of entry and the number and type of credit hours transferred.

Tier II: Breadth of Knowledge

Students entering Ohio University in September, 1981, and in subsequent years are required prior to graduation to complete a total of 30 credit hours from an approved list of courses in the following areas:

- Applied Science and Technology (A)
- Humanities and Fine Arts (H)
- Natural Sciences and Mathematics (N)
- Social Sciences (S)
- Third World Cultures (T)

Students are required to take at least four credit hours in four of the five distribution areas and may satisfy no more

than two of the required four areas with courses from a single department. Students may satisfy no more than 12 of the 30 hours with courses from a single department.

Courses that fulfill a Tier I requirement cannot be applied toward Tier II. A student may apply one approved Tier II course in his or her major department toward the partial fulfillment of the Tier II requirement. (In the case of bachelor of general studies students, one approved Tier II course in the area of concentration may fulfill a Tier II requirement.)

Courses chosen to satisfy Tier II requirements should form a coherent focus governed by each student's goals and interests. This focus should be established in consultation with a faculty advisor prior to scheduling Tier II courses. To assist in designing such a focus, a list of possible clusters of courses, intended as examples, will be available from advisors.

The students may select, in consultation with the advisor, courses from among the following departments as listed by their catalog numbers, to fulfill the Tier II breadth of knowledge focus. Please consult the *Courses of Instruction* section of this bulletin for descriptions of courses currently approved. Approved courses are marked by (2A), (2H), (2N), (2S), or (2T) following the title and credit hours.

Applied Sciences and Technology

Educational Media: 201
 Electrical Engineering: 150
 Engineering & Technology: 106, 320, 325, 326, 331, 334, 337, 350, 360, 470
 Geography: 201, 260
 Geological Sciences: 201, 270, 291E, 291I
 Hearing and Speech: 108, 209
 Home Economics: 128
 Industrial and Systems Engineering: 422
 Industrial Technology: 101
 Microbiology: 211, 212
 Telecommunications: 208
 Zoology: 103

Humanities and Fine Arts

Afro-American Studies: 110, 150, 210, 211, 250, 310, 350, 355, 356
 Archaeology, Classical: 201, 203
 Art: 100, 101, 102, 105, 115, 128, 131, 141, 151, 191
 Art History: 211, 212, 213
 Comparative Arts: 117, 118, 211, 212, 213, 317, 318
 Dance: 120A, 120B, 120C, 170, 220A, 220B, 220C, 320A, 320B, 320C, 370, 420A, 420B, 420C, 471, 472, 473
 English: 200, 201, 202, 203, 204, 205, 206, 210, 270, 271, 301, 301A, 302, 302A, 303, 303A, 304, 312, 313, 314, 315, 316, 317A, 317B, 317C, 318, 321, 322, 331, 345, 360, 361, 362
 Film: 201, 202, 203, 340, 341
 Foreign Languages and Literatures: *Classical Languages*: 127, 234, 235, 236, 237. *Greek*: 111, 112, 113, 211, 212, 213. *Latin*: 111, 112, 113, 211, 212, 213, 351, 352, 353. *Modern Languages*: *French, German, Russian*: 111, 112, 113, 211, 212, 213, 341, 342, 343, 348, 349, 355, 356. *Italian*: 111, 112, 113, 211, 212, 213, 341, 342, 343, 348, 349. *Spanish*: 348, 354, 355, 356. *Foreign Literatures*: 335, 336, 337, 338A, 338B.
 History: 121, 122, 123, 314DEF, 328, 329ABC, 330, 331, 351, 352, 353AB, 354, 356ABC, 370, 389.
 Home Economics: 405A
 Humanities: 107, 108, 109, 117, 307, 308, 309
 Interpersonal Communication: 101, 103, 104, 215, 220, 353ABC
 Music: 100, 101A, 102A, 103A, 120, 121, 122, 123, 141A, 142A, 143A, 147A, 148A, 149A, 241A, 242A, 243A, 244B, 244C, 245, 246, 249, 250, 251, 252, 253, 254A-E, 255, 256, 257, 340-358.
 Philosophy: 101, 130, 160, 216, 230, 232, 240, 250, 260, 301, 310, 311, 312, 314, 320, 330, 333, 350, 361, 362, 373
 Theater: 110, 130, 131, 132, 170, 171, 270, 271, 272, 350, 470, 471, 472, 473, 474, 475, 476, 477A, 477B, 477C
 Women's Studies: 100

Natural Sciences and Mathematics

Anthropology: 201
 Astronomy/Physical Science: 100, 100B, 100D
 Botany: 101, 102, 103, 110, 111, 180, 185, 247
 Chemistry: 121, 122, 123, 141, 142, 143
 Geography: 101
 Geological Sciences: 101, 211, 291ABCDGK
 Mathematics: 163AB, 211, 250A, 250B, 263ABC
 Physical Science: 101/101L, 105/105L. Regional campuses only:
 121/121L, 122/122L, 123/123L.
 Physics: 201, 202, 203, 251, 252, 253
 Zoology: 101, 150, 151, 225, 373

Social Sciences

Afro-American Studies: 201, 202, 220, 225, 331, 340, 360, 440
 Anthropology: 202
 Business Law: 255
 Economics: 101, 102, 301, 302
 Education: *Guidance and counseling*: 201, 410, 440. *Curriculum and instruction*: 200, 271
 Geography: 121, 130, 141, 230, 240, 242, 343
 Health and Sport Sciences: 202, 400
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Tier III: Synthesis

Students entering Ohio University in September, 1982, or thereafter, are required, after attaining senior rank, to take one of the courses approved as meeting the Tier III criterion of interdisciplinary synthesis. Likewise, transfer students attaining senior rank at the end of the 1984-85 academic year or thereafter also must meet this requirement. Tier III is not required for students who entered

Ohio University prior to September, 1982; however, such students are encouraged to take a Tier III course.

Because of changes in the list of Tier III courses available, students must consult current University College publications about General Education.

Services for Students**ACADEMIC ADVANCEMENT CENTER**

The Academic Advancement Center helps beginning students develop basic skills and attitudes necessary to successfully master college-level work. Individualized instruction is available upon request in reading, writing, and study skills. Credit-bearing courses in reading and study skills are also offered to freshmen. See the *Courses of Instruction* section for course content descriptions. The center additionally provides tutoring help sessions in many freshman-level courses. Students may attend help sessions as frequently as desired to ask questions and to clarify points of confusion.

Project CAP, or the College Adjustment Program, is a special program for selected freshmen entering Ohio University. Sponsored by the Academic Advancement Center, its purpose is to help new students adjust to college and to improve their chances to succeed. Project CAP is a comprehensive program of basic skills instruction, supportive counseling, and tutoring. Selection of students invited to participate in Project CAP is based on high school records, aptitude test results, and family income.

The Minority Support Counseling program helps minority students adjust to living at Ohio University. The program's primary emphasis is on academic performance adequate for a successful college career. Peer counselors serve as advisors and friends for students who are learning to master university life. The counselors, upperclass or graduate students, also serve as liaison between students and professors, administrators, and University services.

For further information about Academic Advancement Center programs, contact the center on the first floor of Alden Library or call 594-6058.

CAREER PLANNING AND PLACEMENT

The Office of Career Planning and Placement, located in Lindley Hall on South Court Street, is designed to assist all students and alumni who seek career or graduate school information.

The Office of Career Planning and Placement assists students in obtaining information regarding types of careers possible with various subject concentrations, preparation required for given careers, and relative opportunities for individuals in various fields for the future.

Traditionally, students have not established contact with career planning and placement offices until their senior year. Since it is now more important than ever to give careful thought and consideration to the planning of one's career, students are encouraged to consult the Office of Career Planning and Placement, the chairpersons of academic departments, or one of the academic deans during their first year of enrollment. Some of the critical functions of the Office of Career Planning and Placement include assisting the student in assessing capabilities, interests, and skills; exploring opportunities associated with acquired knowledge; and preparation for the interview and job search process (*i.e.*, resume preparation and interviewing skills).

The Office of Career Planning and Placement serves as a liaison between University graduates and potential employers. Representatives from these areas are invited to the campus for the purpose of sharing information and

interviewing prospective employees. **ONLY EQUAL OPPORTUNITY EMPLOYERS ARE PERMITTED TO RECRUIT ON CAMPUS.** Upon request and the payment of a nominal fee, a credential file is also maintained for each student. This includes the student's academic record, resume, and references, all of which are made available to prospective employers with the consent of the student.

COMPUTING AND LEARNING SERVICES

Computer Services. The Instruction and Research Center provides state-of-the-art computing resources and facilities to all Ohio University students at no charge. Professors or instructors will arrange for student access to the computer resource.

The Instruction and Research Center operates a number of satellite labs across the campus where students may use computer terminals or microcomputers for their academic work. All labs have a program advisor on duty who will assist students with programming language problems and in using the computer facilities. All terminals and many of the microcomputers in the labs can be used to access Ohio University's network of computers.

Four of the labs, the Alden and Haning instruction support labs, and the Copeland and Lindley microcomputer labs, have a variety of microcomputers available to students. A wide array of software is available for the microcomputers, including FORTRAN, PASCAL, BASIC, WORDSTAR, APPLE PILOT, SUPERCALC, and others.

The Alden Instruction Support Lab also houses 26 self-instructional audio-visual carrels allowing students to use videocassette playback equipment as well as synchronized slide and filmstrip equipment as required by academic courses.

The main offices for the Instruction and Research Center and the Haning Instruction Support Lab are located on the first floor of Haning Hall. The Alden Instruction Support Lab is located on the second floor of the Alden Library; the Copeland Microcomputer Lab is in Copeland Hall, Room 17; and the Lindley Microcomputer Lab is located in Lindley Hall, Room 200. The lab located in Jefferson Hall contains a printer and a cluster of terminals, and is a pilot program aimed at bringing the computer facilities into the student residence halls for the convenience of the students.

Learning Resources Center. The Learning Resources Center, located on the second floor of Alden Library, provides audio-visual facilities and services to the entire University community. The center's media library contains over 1,000 instructional films, videotapes, and other media. Instructional development and graphic/photo-graphic production services, which generate a variety of self-study and group-instruction materials, are available for academic courses at faculty request. Advice on purchase and configuration for several models of personal computers also is available. Audio-visual equipment such as projectors and tape recorders may be rented by registered campus student organizations.

A brochure describing in detail all of the Computing and Learning Services is available upon request.

COUNSELING AND PSYCHOLOGICAL SERVICES

Counseling and Psychological Services provides confidential professional individual or group counseling and/or psychological therapy to undergraduate and graduate students with educational, career, and a wide variety of stress-related problems.

Students having educational difficulties such as not performing up to their potential may receive help in clari-

fying and resolving their concerns.

Students who are uncertain about their educational and career objectives can obtain help in appraising their abilities, interests, performances, and personal characteristics so that they may identify more appropriate and satisfying directions.

Students with personal problems of any kind (emotional, social, marital, substance abuse, etc.) may receive assistance in better understanding and resolving their problems.

Information about a wide variety of occupations is available without an appointment.

Workshops on a variety of topics, designed to enhance the educational, social, and personal growth of students, are offered each quarter.

A student wishing an appointment about educational, career, or personal concerns should contact the receptionist on the third floor of Hudson Health Center (use the side entrance next to Voigt Hall) between 8 a.m. and 5 p.m., Monday through Friday. Phone: 594-6081.

HOUSING OFFICE

The main function of the University Housing Office is to assist students in acquiring housing on the Ohio University campus.

The Housing Office is responsible for all residence hall and room assignments for students residing in University-owned residence halls, and the office initiates all room and board charges.

The Housing Office supervises assignment and maintenance of the married student apartment complexes.

Housing Regulations

All freshman and sophomore students with fewer than 90 earned credit hours must reside in University-owned housing and participate in the associated mandatory board plan, subject to the exemptions listed below. Status will be determined on the basis of quarter hour credits earned at the conclusion of the immediately preceding spring quarter for continuing students. A student who is close to achieving 90 hours of credit at the conclusion of the spring quarter may petition to delay satisfaction of the required hours until the end of the summer session. Students requesting this extension who fail to earn a certified 90 hours at the conclusion of the summer session will be required to comply with the housing regulation. For transfer and reenrolling students the number of hours earned will be subject to certification by the director of admissions. For relocating students the number of hours earned will be subject to certification by the director of registration. Failure of a student, subject to the parietal rule, to comply with this condition of registration is cause for denial or cancellation of registration.

The exemptions, which must be requested in writing, are:

1. Students with fewer than 90 earned credit hours enrolled for not more than eight quarter hour credits during the fall, winter, or spring quarters and for fewer than three hours during a summer session;
2. Married students with fewer than 90 earned credit hours residing with their spouses within commuting distance of the University;
3. Students with fewer than 90 earned credit hours residing with parents or guardians whose permanent residence is within commuting distance of the University;
4. Students with 45 or more earned credit hours living in recognized fraternity or sorority houses;
5. Student veterans with fewer than 90 earned credit

hours who have 18 months or more of active military service.

NOTE: All students with 90 or more hours of credit earned are permitted to reside in housing which coincides with their individual needs. It should be noted that the University bears no responsibility to either the homeowner or the student resident for the living conditions or problems arising in off-campus housing.

Telephone Service. Telephone service is not part of the Room and Board Contract. Students wishing telephone service must sign up directly with General Telephone Company of Ohio after room assignments are made.

Special Students. All special students must comply with the above regulations.

INSURANCE, MAJOR MEDICAL

A major medical insurance plan designed to supplement the care provided by the University Medical Services is mandatory for every student registered for more than six hours of credit unless the student submits evidence of coverage by comparable private insurance.

The plan provides protection against major medical and surgical expenses regardless of where the student may be. In addition to the medical and surgical benefits payable under the terms of the group plan contract, an accidental death payment is part of the insurance policy.

To assist married students, a major medical-surgical expense protection insurance plan for dependents is available through the University comprehensive group medical insurance.

INTERCOLLEGIATE ATHLETICS

Ohio University is a charter member of the Mid-American Conference (MAC) which is composed of 10 midwestern universities including: Ball State, Bowling Green, Central Michigan, Eastern Michigan, Kent State, Miami, Northern Illinois, Toledo, and Western Michigan.

The Athletic Department adheres to the policies and procedures of the National Collegiate Athletic Association (NCAA) concerning organization, administration, and financing.

Ohio University fields a total of 19 intercollegiate sports including 10 men's teams and 9 women's teams. The University offers baseball, basketball, cross country, football, golf, tennis, swimming, indoor track, outdoor track, and wrestling for men. Women's sports include basketball, cross country, field hockey, softball, swimming, tennis, indoor track, outdoor track, and volleyball.

Rich in athletic history, Ohio University has placed first or second in the Reese Trophy standings 18 times in 24 years. The Reese Trophy is awarded annually to the institution compiling the best overall record in the MAC.

Athletic facilities include the 13,072-seat Convocation Center, the site of all Ohio University home basketball games. Constructed in 1968, the facility houses the athletic offices, training facilities, weight room, and equipment room. Peden Stadium, with a seating capacity of 17,550, is the home of Ohio University football and is the site of the all-weather Goldsberry Track. In 1982 and 1983 twelve new championship tennis courts were constructed. The remodeled baseball field, Trautwein Field, ranks among the finest facilities in the MAC. Constructed in 1983, the Aquatic Center is the newest athletic facility. The Olympic-sized swimming pool includes sixteen 25-yard lanes and nine 50-meter lanes in addition to a one-meter and a three-meter diving board.

Students interested in participating in intercollegiate athletics should contact the head coach of the preferred sport directly.

INTERNATIONAL STUDENTS

Admission. Information concerning the admission of undergraduate foreign students may be obtained from the Director of Admissions, Chubb Hall. Graduate students should contact the Office of Graduate Student Services, Wilson Hall.

Financial Aid. There is a very limited amount of financial aid available for undergraduate foreign students. In no case does this cover more than a portion of tuition or other expenses. Students entering from overseas are eligible to apply for awards based on academic promise; students already enrolled at Ohio University may apply for the same awards, and in addition may request special aid in cases of demonstrated need. Undergraduate students may apply for these scholarships and grants-in-aid by contacting the Student Financial Aids and Scholarships Office. Graduate students should apply to the academic department in which they plan to enroll.

International Houses. Two centrally located residence halls offer special programs for roughly equal numbers of foreign and American students. The emphasis is on cultural interaction and mutual understanding. A large meeting room, lounges, and a dining facility are available. Students with interest in international affairs are encouraged to select rooms in these halls. Staff, both foreign and American, are selected because of their interest and training in foreign affairs.

Associations. The International Student Association is the major organization of foreign students at Ohio University. It represents over a dozen national, religious, and cultural groups and, with their cooperation, funds and presents a number of special events throughout the year. International Week is one of these.

Athens Friends of International Students runs a hospitality program and an International Wives' Club and, on a modest scale, matches foreign students with American families in Athens, Ohio, and the vicinity. These visits are short, and may be only for a dinner or an afternoon excursion, but sometimes long friendships develop from this brief opportunity to gain insights into American life.

The International Wives' Club brings together the wives of foreign students on campus and interested wives of faculty and community people. It serves as a forum for ideas and information which they find useful to share, and offers a productive and easy way to participate in University life.

Ohio Program of Intensive English (OPIE). The OPIE administers English proficiency examinations to all new foreign students and provides intensive language instruction for those needing it. See descriptions of courses and program elsewhere in this catalog.

The International Student and Faculty Services Office. This office is available for consultation on all matters of interest to foreign students, including immigration, financial, and personal problems. All new students from abroad must report to the advisor's office upon arrival. An orientation program will be conducted for a few days prior to the opening of each quarter in order to introduce new students to the campus.

INTRAMURAL AND CLUB SPORTS AND RECREATION ACTIVITIES

The Ohio University Intramural Sports Department offers a wide range of activities (approximately 33 different sports) for men and women, involving individual, dual, and team competition. A coed program for dual and team competition is also offered in a majority of activities. A limited recreational program is available when time and facilities permit. Some of the major intramural activities offered are football, basketball, broomball, volleyball, innertube water polo, softball, tennis, racquetball, and golf.

The Ohio University Club Sports Department serves as the administrative unit for all recognized sports clubs on campus. Any group of students, faculty, and staff who wish to organize for the purposes of practicing and competing, or individuals interested in a particular club, should contact the department. Currently there are 22 recognized clubs.

For further information contact the Department of Intramural and Club Sports in Grover Center.

LIBRARIES

The main library facility on the Athens campus is in the Vernon Roger Alden Library. The seven-story, air-conditioned modern library building has a shelving capacity of 1.4 million volumes and seating accommodation for 3,200 readers. Alden Library is open seven days a week for a total of 102 hours.

Collections. In March, 1979, the collections of the libraries passed the one-million-volume mark, including periodical sets and government documents but excluding over one million microfilm units. The library also subscribes to more than 8,000 current journals and newspapers. Besides the main collection which is arranged by the Library of Congress Classification System, there are separate subject and special collections: the Archives and Special Collections, Children's Collection, Government Documents, the Health Sciences Library, Maps Collection, Microforms and Nonprints Collection, and Southeast Asia Collection. In separate buildings are the Music/Dance Library, Slide Library, and a number of departmental collections in several scientific disciplines. Each of the regional campuses also has a well-established library facility.

Services. To make the library's collections more accessible to its users, a computerized charging system and on-line catalog system were implemented in 1983. Catalog terminals are placed throughout the library for easy access to the library's holdings. General tours, instructional lecture tours, and a video orientation presentation are offered to classes and groups upon request. Subject bibliographers' services are available to give assistance with problems in specific academic disciplines.

On-line information retrieval systems, including MEDLINE and CIRS (Computerized Information Retrieval Service) are available. Through the OCLC nationwide shared cataloging and interlibrary loan network library collections across the country are now easily accessible. The library is part of the age of resource sharing to better serve the academic community.

Academic Advancement Center. The Academic Advancement Center is located on the first floor of the library. See description of services elsewhere in this section.

MEDICAL SERVICES

Medical Services facilities are located in the Hudson

Health Center. They include an outpatient clinic and complete ancillary services, including x-ray, clinical laboratory, physical therapy, pharmacy, dental clinic, and health education services.

The Medical Services staff includes full-time physicians; a dentist; a pharmacist; a coordinator of health education services; registered nurses; and registered laboratory, x-ray, and other allied personnel.

A continuous health record is maintained on each student, beginning with the report of medical history obtained at the time of the student's first visit to the Hudson Health Center for evaluation and/or treatment of any medical condition. A tuberculosis skin test administered by the University Medical Services is required at the time of the students' arrival on campus of all new international students and those returning after an absence of two or more years.

MOTOR VEHICLES

University policy and regulations state that no student shall drive, operate, park, or otherwise use a motor vehicle on the land and property of the University without first registering said motor vehicle with the director of security. This regulation includes student-owned vehicles; vehicles belonging to parents or relatives (including wives or husbands); and vehicles belonging to friends, rental agencies, and dealers.

Upon registration the student will be given a decal which must be attached to the vehicle as described in the brochure issued with the decal.

Failure to register a motor vehicle as provided by the regulations will result in a fine and/or disciplinary action.

While two- and three-wheeled motor vehicles are not permitted in the residence hall areas of the University, they are permitted on certain designated streets on the campus. They may be parked only in areas specifically designated as motorcycle parking.

Parking Areas 15, 17, 18, 19, 20, 22, 25, 26, and 27 are open for parking of registered student vehicles from 3 p.m. to 3 a.m. Monday through Friday, 6 a.m. to 3 a.m. Saturday, and 6 a.m. to 3 a.m. Sunday.

OMBUDSMAN OF THE UNIVERSITY

The ombudsman's primary responsibility is to assist students and other members of the University community in expediting settlement of complaints and grievances. Using broad investigatory powers and direct access to all University officials of instruction and administration, the ombudsman may intervene in the bureaucratic process on behalf of individuals when that process unnecessarily or unfairly impinges upon them.

Those with problems should first try to discuss their concerns with the person most closely associated with the situation. Should such discussion seem difficult or fail to bring acceptable results, the ombudsman may prove an invaluable aid. The ombudsman's office is in McGuffey Hall.

RESIDENCE LIFE

The focus of this department is to support and enhance the educational goals of the University in the residence halls. The staff is committed to promoting the concepts of community living, facilitating the development of individuals and groups within the living environment, and providing support and information to the residents.

The residential campus is divided into three distinct geographical areas commonly referred to as greens. There is a Residence Life office located on each green, East, South, and West, for student convenience. The central office is located in 050 Chubb Hall.

Each green has a number of full-time professional, as well as some paraprofessional, live-in staff who have been carefully selected and trained so as to offer the resident student the most informed and meaningful assistance possible. The staff-to-student ratio in upperclass halls is about 1:31, while in freshman halls it is 1:24.

Services offered by this department include: providing a safe and healthful environment which is conducive to sound academic pursuit; creating opportunities for growth and development through educational, recreational, social, and cultural programming activities designed to meet the needs and interests of the students; promoting student involvement and leadership by encouraging active participation in hall government; emphasizing the concepts of self-responsibility, respect, and consideration for others; interpreting University policies and procedures; serving the resident students as an information source and as a referral agent to other University services; and providing confidential personal advising for such concerns as adjustment, substance abuse, interpersonal relationships, etc.

Research indicates that much of the learning that occurs during the collegiate experience takes place outside the formal classroom setting. The living-learning atmosphere of the residence hall is one of the prime catalysts in this growth process. While each residence hall is unique in character and spirit, they all offer the opportunity to meet, interact with, and learn from a very diverse student population.

SPEECH AND HEARING SERVICES

The Speech and Hearing Clinic offers diagnostic and remedial services without charge to University students. University faculty and staff are charged for services at a nominal rate, which is less than the charges to the general public. Clinical services are available to children and adults of the community and surrounding area for a nominal charge. All types of speech and/or hearing disorders in all age ranges are evaluated and receive therapy. The audiological division is equipped and staffed to provide complete hearing diagnostic services, to determine the need for and recommend special kinds of hearing aids, and to provide therapy for all types of hearing loss.

A program for language and speech development operates in the on-campus clinic five days a week, and regional county clinics serve clients every Saturday. Undergraduate and graduate students prepare for clinical practice in public schools, special schools, private clinics, or for university teaching and research. Persons wishing counseling about the training program, information about the service program, or help with a speech or hearing problem should inquire at the clinic office in Lindley Hall between 8 a.m. and 5 p.m., Monday through Friday.

STUDENT FINANCIAL AIDS AND SCHOLARSHIPS

The Ohio University Office of Student Financial Aids and Scholarships will assist students who need help in financing their college education and recognize students for their academic achievements and special talents. Financial assistance is not intended to replace the financial responsibility of the parents and students; rather it is intended to supplement that which can be provided by the family.

Insofar as funds are available, the University attempts to provide all eligible applicants with financial assistance through a program consisting of scholarships, grants, loans, and part-time employment. Additional assistance can be applied for through federal, state, and private agencies.

Basis for Financial Assistance Awards

The assistance offered by the Office of Student Financial Aids and Scholarships is based on the assumption that the total of (1) parents' financial contribution, (2) student's summer earnings, (3) available financial assistance from Ohio University, and (4) financial assistance from other sources, does not exceed the student's cost of attendance during an academic year at Ohio University.

Example (incoming freshman):

Cost-of-attendance budget (in-state)	\$5,520
Parents' contribution	-755
Summer savings	-700
Amount needed	4,065

Ohio Instructional Grant	500
Pell Grant	1,362
Ohio University Aid*	1,200
Total assistance awarded	3,062

*Can consist of College Work-Study Program, National Direct Student Loan, Supplemental Educational Opportunity Grant, and/or scholarship.

If you are receiving financial assistance from the Office of Student Financial Aids and Scholarships and at a later date are awarded financial assistance from other sources (example: outside scholarship or outside employment during the school year), you must notify the Office of Student Financial Aids and Scholarships immediately as to the source and amount of such assistance. If your total resources do exceed your cost of attendance at any time during the academic year and part of your existing financial assistance involves the use of federal campus-based funds (SEOG, NDSL, or CW-SP), the Office of Student Financial Aids and Scholarships is required by laws governing federal aid programs to delete whatever amount of assistance is determined to have exceeded your cost of attendance.

Information concerning these types of aid is available from the Office of Student Financial Aids and Scholarships, Room A, Chubb Hall, Ohio University, Athens, Ohio 45701-2979 (Phone: 614/594-5471).

Scholarships

Scholarships are awarded on the basis of an applicant's demonstrated excellence in academic and talent areas. Faculty from each academic college are involved in the evaluation and selection process. Financial need is not always a prerequisite.

Manasseh Cutler Freshman Scholarships. These one-year scholarships are valued at \$750. They are awarded to high school seniors and transfer students who have earned fewer than 45 hours. Criteria for selection may include but are not limited to class rank, grade average, ACT/SAT test scores, recommendations, activities, interviews, and audition.

Trustee's Freshman Scholarships. These scholarships are valued at \$1,000 annually and are awarded for high academic achievement as demonstrated by class rank, grade average, ACT/SAT test scores, recommendations, activities, interviews, and audition.

Upperclass Dean's Scholarships. Ranging from \$500 to \$1,000, these scholarships are one-year awards for upperclass students (with more than 45 hours). Students are selected on the basis of criteria established by faculty in their academic colleges. Students must reapply and compete annually for renewal.

Special Talent Awards. A student with exceptional talent in art, athletics, creative writing, dance, debate, forensics, music, telecommunications, or theater may receive a Manasseh Cutler Scholarship (freshman) or a Dean's Scholarship (upperclass) for that talent. Interested students should contact the respective department for additional information.

Corporate Scholarships. Available to students majoring in specific academic areas (engineering, business, sciences) on the basis of high academic achievement, these awards range from \$300 to \$2,000 annually. Eligibility normally includes demonstrated financial need.

Endowed Scholarships. Available to students with high academic achievement and demonstrated financial need, these endowed scholarships are made available from contributions of alumni and friends of Ohio University and are usually restricted by geographic locality or major. Awards range from \$150 to \$2,000 per year.

National Merit Scholarships. These scholarships are awarded to National Merit finalists who indicate Ohio University as their first choice institution. National Merit Scholarships are four-year awards ranging in value from \$750 to \$2,000.

Reserve Officers Training Corps Scholarships. Four-year, three-year, two-year, and one-year scholarships are available on a competitive basis for qualified students participating in the Air Force (Aerospace Studies) or the Army (Military Science) program. These scholarships pay cost of tuition, fees, books, and laboratory expenses. In addition, recipients receive a subsistence allowance at the rate of \$100 per month for the period the scholarship is in effect. Interested students should contact the Department of Aerospace Studies or the Department of Military Science.

Grants

(Unlike loans, grants do not have to be repaid.)

Pell Grant Program. This is a federal aid program designed to provide financial assistance to those who need it to attend post-high school educational institutions. It is estimated that during the 1984-85 academic year the awards will range up to \$1,900.

To apply for the Pell Grant, you must file a Financial Aid Form (FAF) with the College Scholarship Service; a separate Pell Grant application need not be completed. An FAF may be obtained by contacting the guidance counselor at your local high school or the Director, Student Financial Aids and Scholarships, Ohio University.

Supplemental Educational Opportunity Grants (SEOG). Recipients are selected from students who have submitted an FAF and Ohio University's Student Information Sheet. Grants range from \$200 to \$800 per academic year depending upon available funding and the amount of financial assistance that the parents are expected to contribute to their son's or daughter's education.

Loans

National Direct Student Loans (NDSL). Federal loans up to \$1,000 per year are available to undergraduate students under this program. No interest is charged on the direct loan while the student remains in school. Six months after the student terminates his or her educational program the repayment period begins at a five percent interest rate. Depending on the amount of the loan, re-

payment may extend over a ten-year period. Cancellation provisions are available to students who become teachers in an area having a high concentration of low-income families or teachers who work with the educationally disadvantaged. The exact amount of the loan is determined by demonstrated financial need and available funding. A cosigner, preferably the student's parent or guardian, is required if the student is under 18 years of age and all loans must be secured by a promissory note.

Guaranteed Student Loans. These loans are available through banks or other lending institutions. Eligible students may borrow up to \$2,500 per academic grade level through this federally insured program. Income level is evaluated as part of the eligibility criteria. Six months after the student graduates or leaves school, repayment begins at an eight percent interest rate. Details and applications are available at participating institutions in the student's hometown area.

Emergency Short-term Loan Funds. There are emergency short-term loans (30- or 60-day) available to assist students in the payment of University bills and educationally related expenses. A student must (1) have a guaranteed source of repayment, (2) be pursuing a full-time course of study, and (3) have a 2.0 accumulative average. Applications for these loans can be obtained in the Office of Student Financial Aids and Scholarships, Chubb Hall.

The availability of monies to be used for short-term loans is attributed to individuals and groups interested in assisting students seeking their education at Ohio University. These loan-fund donors, in alphabetical order, are alumni, Bishop, Campus Affairs Committee, engineer, Fenzel, Lichter, Men's Union Emergency, Parks, Shaw, Student Council, C.F. White, and Women's League.

Employment

Centralized Student Employment Policy. Ohio University established the Centralized Student Employment Services in 1974. This job service is centrally located in the Office of Student Financial Aids and Scholarships (020 Chubb Hall, Room A) in an effort to provide all students with job opportunity information. Because the job-posting service is centralized, students are assured an equal opportunity to apply for jobs. Discrimination by race, creed, color, ancestry, sex, handicap, or national origin is prohibited. The service also ensures uniform wage rates for comparable tasks and helps to coordinate student employment policies and procedures. Except for Work-Study jobs and contracts from the Office of Graduate Student Services for graduate students, all vacant student positions are posted in the Office of Student Financial Aids and Scholarships.

Job listings appear on a job board outside Room A. Students are referred to employing departments for interviews and a hiring decision. A consistent grievance procedure is also followed by all departments employing students. This procedure is monitored by the Office of Student Financial Aids and Scholarships' student employment division. For more information on our Centralized Student Employment Policy, please stop by Chubb Hall and get a detailed description of the Student Employment Service.

College Work-Study Program (CW-SP). Students may earn a portion of their educational expenses through part-time employment in the College Work-Study Program. Students apply for the College Work-Study Program through the Office of Student Financial Aids and Scholarships and must demonstrate financial need to

qualify for the program. Employment opportunities generally coincide with the student's interest or academic major. Application for College Work-Study may be made for any three out of four quarters (summer, fall, winter, spring). Inquiries and requests for applications should be directed to the Office of Student Financial Aids and Scholarships, Chubb Hall, Ohio University, Athens, Ohio 45701-2979.

Program to Aid Career Exploration (PACE). PACE, operated by the Office of Student Financial Aids and Scholarships and the Office of Career Planning and Placement, provides career-oriented work experiences to full-time juniors and seniors on the Athens campus who may not qualify for existing need-based and/or merit-based financial assistance programs. Students must demonstrate financial need and have a minimum 2.5 cumulative grade-point average. Selected students normally work one to three quarters for 5-15 hours per week at \$3.50/hour. Application forms are available in the Office of Student Financial Aids and Scholarships, 020 Chubb Hall, Room A.

STUDENT ACTIVITIES

The Office of Student Activities, located in Baker Center, plans, coordinates, and supports cocurricular activities on the Ohio University campus. Students are encouraged to become active in any of the many organizations or programs available. All are designed to help the individual complement his or her academic growth by being involved in campus life outside of the classroom.

Leadership Development. The Ohio University Leadership Development Program, coordinated through the Office of Student Activities, offers a comprehensive and integrated series of workshops, conferences, and seminars. Students who choose to become involved can learn personal, interpersonal, and organizational skills and concepts that are designed to help each individual develop his or her potential. Specific programs include decision making, goal setting, time management, problem solving, and leadership styles.

Student Organizations. Over 225 student organizations are registered with the Office of Student Activities. Each offers a unique opportunity for involvement. Included are honoraries, special interest groups, profession-

al associations, political groups, governing bodies, club sports, religious groups, and service organizations.

Greek Life. There are 26 nationally-affiliated fraternities and sororities recognized on the Athens campus. These groups are governed by Women's Panhellenic Association, Interfraternity Council, and National Panhellenic Council. The Office of Student Activities acts as University liaison and advisor.

Student Senate. Elected by the student body, this group speaks on behalf of students in matters pertaining to University policy. It recommends student appointees to University standing committees and, through its Student Activities Commission, is responsible for allocating funds to registered student organizations.

Programming. The Office of Student Activities plans and coordinates a wide range of human-relations programs for the campus with special attention to concerns of women and minorities. Programs include assertiveness training, sex-role stereotyping, rape awareness, cultural sensitivity, and living with differences.

Many major campus events and programs are planned by four student organizations: Center Program Board, Black Student Cultural Program Board, Pop Concert Committee, and Student Lecture Series. These groups, advised by the Office of Student Activities, plan social, cultural, recreation, and entertainment programs for the campus.

Baker Center. The John Calhoun Baker University Center is a focal point of co-curricular activities on campus. The center houses the Office of Student Activities, many student organization offices, the student-run campus newspaper *The Post*, the *Athena* yearbook, as well as meeting facilities, a full service recreation center, the Frontier Room campus pub, Suzi Greentree's restaurant, television and piano lounges, and the campus information center.

The Helen Mauck Galbreath Memorial Chapel. The chapel provides the University and Athens communities with an interdenominational center for individual and group meditation, worship, programs, or ceremonies. It is open daily and is available to any student, faculty, or staff person for weddings, receptions, or services.

Colleges and Curricula



College of Arts and Sciences

George R. Klare, *Acting Dean*

Richard D. Koshel, *Associate Dean*

Donald M. Borchert, *Associate Dean*

Student Affairs:

William R. Jones, *Assistant Dean, Director of Student Affairs*

Alice O. Kemmerle, *Assistant to the Dean*

Peter Heidtmann, *Assistant to the Dean*

Ohio University remained a liberal arts college for almost one hundred years after it was founded. With the expansion of curricula and organization of new colleges and divisions during the last 80 years, the College of Arts and Sciences has held to what has been the central purpose of the college since 1804: to provide opportunities for the student to secure a sound liberal education. Since its focus is on the more general concerns of humanity, it is broader than, but in many cases includes, an education for immediate application. A liberal education implies teaching with a desire to impart knowledge, to encourage critical-mindedness, to increase the level of objective and quantitative thinking, to demand clear expression, and to reveal insights and ideas important to the thinking of free men and women. It also implies active effort on the part of the student to learn what is taught. Its greatest service is in its commitment to reason, in its search for basic knowledge, in its devotion to the study of humankind's many cultures. A liberal education also affords an acquaintance with the language, skills, and methods in some scholarly area at a level that is more than merely introductory. It prepares the student for advanced graduate or professional training and in many cases for a more immediate vocation. In step with the changing needs of our society, the college has maintained the central purpose of a liberal education as a sound basis for training while providing special curricula and area studies based on research and geared to today's career opportunities.

These objectives are achieved through the courses which make up the curricula of the college — courses which historically have been regarded as the means whereby people have come to understand themselves and the world in which they live. These courses have taken a place in our academic disciplines as the result of today's technological and scholarly advances. The student gets specialized knowledge in some particular field through major requirements, and also gets a fundamental education in foreign languages and other humanities, social sciences, and natural sciences. In line with these goals, the following pages illustrate that the A.B. and B.S. degrees require specific courses in the major area. Beyond

this, and with the University's General Education requirements as a foundation, the degree requirements are designed to cause students to familiarize themselves with the languages, humanities, social sciences, and natural sciences as separate areas but with considerable freedom of choice within the areas. In addition, most programs allow for as much as a full year of elective study.

The College of Arts and Sciences is the largest and oldest college at Ohio University. Comprising 20 departments, the college offers 27 regular major programs; 19 minors; 41 special programs which prepare for specific, career-related goals; and 6 majors arranged in cooperation with other colleges. As part of any of the major programs, the student may select a minor from those offered by most departments in the college, or the student may choose to complete a formal minor in business administration. The college also offers a certificate in women's studies, which can be part of any program offered by the University. A two-year associate in applied science degree program is offered in mental health technology.

DEPARTMENTS

The College of Arts and Sciences comprises the following 20 academic departments:

- Afro-American Studies
- Botany
- Chemistry
 - Forensic Chemistry
 - Industrial Hygiene
- Classical Languages
 - Classical Archaeology and Antiquities
 - Greek
 - Latin
- Computer Science
- Economics
- English Language and Literature
 - Creative Writing
 - Great Books

Geography
 Cartography
 Meteorology and Climatology
 Geological Sciences
 History
 Linguistics
 Arabic
 Chinese
 Indonesian, Malaysian
 Japanese
 Swahili
 Mathematics
 Modern Languages
 French
 German
 Italian
 Portuguese
 Russian
 Spanish
 Language Laboratory
 Philosophy
 Physics and Astronomy
 Astronomy
 Physical Sciences
 Physics
 Political Science
 Public Administration
 Psychology
 Social Work
 Mental Health Technology
 Sociology and Anthropology
 Zoological and Biomedical Sciences
 Microbiology
 Zoology

The college also includes the following seven program units:

The Institute for Local Government Administration and Rural Development
 The Master of Environmental Studies Program
 The Master of Liberal Studies Program
 The Master of Social Studies Program
 The Ohio Program of Intensive English (OPIE)
 The Rural Gerontology Program
 The Women's Studies Program

Master's and doctoral degree programs are offered by the departments of Botany, Chemistry, English Language and Literature, History, Mathematics, Physics and Astronomy, Psychology, and Zoological and Biomedical Sciences. Master's degree programs are offered by Economics, Geography, Geological Sciences, Modern Languages, Philosophy, Political Science, and Sociology and Anthropology.

Information about the master's and doctoral programs can be found in the *Ohio University Bulletin: Graduate Catalog*.

DEGREES, MAJORS, AND MINORS

The college offers two four-year degrees — the bachelor of arts (A.B.) and the bachelor of science (B.S.).

A major for the A.B. degree may be completed in the following areas:

Afro-American Studies
 Anthropology
 Botany
 Chemistry
 Classical Languages (Latin)

Computer Science
 Economics
 English Language and Literature
 Geography
 Geological Sciences
 History
 International Studies
 Mathematics
 Modern Languages
 French
 German
 Spanish
 Philosophy
 Physics
 Political Science
 Psychology
 Social Work
 Sociology
 Zoology

See the *Courses of Instruction* section in the back of this catalog for the major requirements.

Arts and Sciences students may complete the following non-Arts and Sciences majors earning an A.B. degree:

Art
 Home Economics
 Interpersonal Communication
 Journalism
 Music
 Theater

Information concerning the requirements for these majors can be obtained from the dean's office.

A major for the B.S. degree may be completed in the following areas (note that the B.S. degree may not be earned for a major in the humanities or social sciences):

Botany
 Chemistry
 Computer Science
 Forensic Chemistry
 Industrial Hygiene
 Geography
 Geological Sciences
 Mathematics
 Microbiology
 Physics
 Zoology

See the *Courses of Instruction* section in the back of this catalog for the major requirements.

Arts and Sciences students may complete a B.S. degree in the following non-Arts and Sciences major:

Home Economics

The college offers the associate in applied science (A.A.S.) degree in mental health technology.

The college offers certificate programs in gerontology and women's studies. These can be part of any program in the University, regardless of the college in which the student is enrolled. The awarding of the certificate is recorded on the student's permanent record. See the *Arts and Sciences Special Curricula* section for the requirements for these programs.

The college offers formal minors in the following areas. The minor in business administration is offered in cooperation with the College of Business Administration. The other minors represent departments within the College of Arts and Sciences. See the *Arts and Sciences Special Curricula* section for the business administration minor requirements and the *Courses of Instruction* section for the other minor program requirements.

Minors

Afro-American Studies
 Anthropology
 Botany
 Business Administration
 Computer Science
 Economics
 English
 Geography
 Geological Sciences
 History
 Linguistics
 Mathematics
 Modern Languages
 Philosophy
 Physics
 Political Science
 Psychology
 Social Service
 Sociology

SPECIAL CURRICULA

The college offers special curricula in the following:

Preparation for Advanced Training in Astronomy
 Preparation for Advanced Training in Botany
 Preparation for Advanced Training in Mathematics
 Preparation for Advanced Training in Physics
 Preparation for Agri-Business
 Preparation for Animal Behavior
 Preparation for Animal Systematics
 Preparation in Applied Mathematics
 Preparation in Applied Physics
 Preparation in Applied Plant Sciences
 Minor in Business Administration
 Preparation in Cartography
 Preparation for Cell Biology
 Preparation in Creative Writing
 Preparation for Criminology
 Preparation for Dentistry
 Preparation for Entomology
 Preparation for the Study of the Environment
 Preparation for Field Biology
 Preparation for Forestry
 Gerontology Certificate Program
 Preparation for Government Foreign Service
 Preparation for Law
 Preparation in Linguistics
 Preparation for Marine and Freshwater Biology
 Preparation for Medical Technology
 Preparation for Medicine
 Two-Year Program in Mental Health Technology
 Preparation for Meteorology
 Preparation for Optometry
 Preparation for Pharmacy
 Preparation for Physical Therapy
 Preparation for Public Administration
 Preparation for Systems Analyst in Geography
 Preparation for Theology and Religion
 Preparation for Urban and Regional Planning
 Preparation for Veterinary Medicine
 Preparation for Water Resources
 Preparation for Wildlife Biology
 Women's Studies Certificate Program
 Preparation for Zoology - Nutrition

See the *Arts and Sciences Special Curricula* section for information about these programs.

DEGREE REQUIREMENTS —
Bachelor of Arts and
Bachelor of Science

A student enrolled in any college at Ohio University may elect courses in any other college with considerable freedom, and much of the coursework required by the other colleges is offered by the faculty of the College of Arts and Sciences. A student pursuing a degree in this college may elect courses, and in some instances may complete a major, in departments of the other degree-granting colleges.

A student entering the College of Arts and Sciences is assigned an advisor who teaches in the area of the student's major. Faculty advisors will assist in the preparation of a schedule each quarter so that the proper sequences of courses in the major and appropriate related courses are selected. **HOWEVER, THE STUDENT IS RESPONSIBLE FOR SEEING THAT ALL REQUIREMENTS FOR THE DEGREE ARE BEING MET.** *Note:* some courses are taught only during certain quarters and some of these are taught only in alternate years; a student's schedule must be carefully planned to avoid scheduling conflicts.

Regardless of the major they are completing, all Arts and Sciences degree students follow a basically consistent outline to determine the requirements for a particular program.

The general requirements for the A.B. or B.S. degree are a total of at least 192 quarter hours, with at least 90 hours in Arts and Sciences coursework above the freshman level (numbered 200 or above), including two years of foreign language; at least 18 hours each of humanities, social sciences, and natural sciences; the University Tier I, Tier II, and Tier III General Education requirements*; and the requirements for the chosen major as stipulated by the appropriate department. Minors are optional. The A.B. and B.S. degree programs differ only in the language requirement (see language requirement section below) and in the specific major requirements as designated by the individual departments (see major requirement section below). Note that earning the A.B. or the B.S. degree is not the student's choice, but is determined by the program selected. The following pages describe the details of these requirements in the order listed.

1. Major Requirement
2. Minor Requirement
3. General Education Requirements
4. Foreign Language Requirement
5. Humanities Area Requirement
6. Social Sciences Area Requirement
7. Natural Sciences Area Requirement
8. Level of Study Requirement (Hours above 200)
9. Total Hours Required and Credit Allowed
10. Single Application of Credit
11. Averages Required
12. General Degree Information
 - a. Advising
 - b. Degree in *Absentia*
 - c. Double Major
 - d. Dual Major
 - e. Pass/fail
 - f. Second Bachelor's Degree
 - g. Teacher Certification
 - h. Time and Resident Course Load Limitations
 - i. Transfer and Transient Study

*Note that courses used to fulfill Tier II requirements in many cases can be applied simultaneously toward fulfillment of the Arts and Sciences distribution requirements.

1. Major Requirement

The specific requirements for each major in the departments in the College of Arts and Sciences are indicated in the *Courses of Instruction* section of this catalog. Special requirements for the preprofessional areas (preparation for medicine, preparation for law, etc.) are explained in the *Special Curricula* section which follows.

The student interested in one of the special curricula must complete the entire special curriculum as indicated, taking care also to see that the University General Education requirements as well as the regular degree requirements of language, humanities, social sciences, natural sciences, and 200-level hours are completed. The student who wishes to complete the regular departmental program should disregard the special curricula and refer to the appropriate major requirements in the *Courses of Instruction* section of this catalog. Requirements for the non-Arts and Sciences cooperative major programs are determined by a special advisor in each department and can be obtained from the office of the dean.

College policy requires that each department's major program consist of a minimum of 36 quarter hours in one subject area. This includes nine quarter hours which must be taken at the junior-senior level. Specific departmental requirements also must be met. It should be noted that most departments require more than 36 hours for the major, and that the student *must fulfill the major requirements stipulated by the department*.

Methods courses are not included in the major. The A.B. degree candidate can count a maximum of 72 hours in one subject toward the degree; the B.S. degree candidate may count a maximum of 80 hours.

Formal majors in the Arts and Sciences disciplines may be completed only by students enrolled in the College of Arts and Sciences. Exceptions are teacher certification candidates who may enroll either in the College of Arts and Sciences or the College of Education, and economics majors, who may enroll either in the College of Arts and Sciences or the College of Business Administration.

2. Minor Requirement

The Arts and Sciences student is not required to complete a minor. However, the college offers formal minors in a number of the regular major areas (see Degrees, Majors, and Minors, preceding). These minors are available to all Arts and Sciences students regardless of majors. With approval of the appropriate dean, students in other colleges can earn these minors. Also available to students in the College of Arts and Sciences is a formal minor in business administration.

College policy requires that a minor consist of a minimum of 24 hours and a maximum of 35 required hours, including at least two courses at the junior-senior level. In the case of foreign languages, the minimum requirement is 21 hours beyond 213, and, for English, courses fulfilling the composition requirement do not count as part of the minor. Within these limits, the distribution of courses is determined by the department. See the *Special Curricula* section which follows for the business administration minor requirements and the *Courses of Instruction* section for the Arts and Sciences minor requirements.

3. General Education Requirements

An educated person needs certain intellectual skills in order to participate effectively in society. These include: (1) the ability to communicate effectively through the written word and the ability to use quantitative or symbolic reasoning; (2) broad knowledge of the major fields of learning; and (3) a capacity for evaluation and synthesis. To meet these objectives, Ohio University has instituted a

three-tier General Education requirement to be met by all students except for Honors Tutorial College students and students enrolled in two-year associate degree programs.

These requirements are presented in detail in the *Graduation Requirements* section of this catalog. The Arts and Sciences student should note the following information.

The University General Education requirements are roughly similar to, but lesser in scale than, the A.B. and B.S. degree requirements. The well-advised student can select coursework which simultaneously will fulfill the University General Education requirements and partially fulfill the Arts and Sciences degree requirements in foreign languages, humanities, social sciences, natural sciences, and hours-above-200. The student should bear in mind that only the courses listed in items 4,5,6,7, and 8 below will apply to the Arts and Sciences degree (distribution) requirements. However, many of these courses apply also to the University General Education requirements. The student can plan for simultaneous completion of these requirements by carefully selecting courses which appear in item(s) 4,5,6, or 7 below and in the General Education Tier II list in the *Graduation Requirements* section of this catalog. Courses appearing only in the Tier II list do not apply to the Arts and Sciences degree requirements.

English courses fulfilling the freshman composition requirement do not apply to the humanities area requirement. ENG 150, a remedial course, will be recommended to some students as the result of their performance on the placement tests. In this case, the regular two-course composition requirement must be completed after the successful completion of ENG 150. Credits earned for ENG 150 will apply as electives toward the required minimum of 192 hours, but will not apply to the humanities requirement. Courses which can fulfill the University Tier I quantitative skills requirement and the Tier III requirement do not apply to the Arts and Sciences area (distribution) requirements. Courses within the College of Arts and Sciences which are numbered 200 or above will apply to the hours-above-200 requirement.

Transfer students who receive transfer credit for comparable courses have no additional composition requirement. Those without comparable courses must complete the requirement as described above.

Courses completing the quantitative skills and the junior-level composition requirements will apply to the Arts and Sciences degree requirements as listed in items 5,6, and 7 below. Credits earned for MATH 101, a remedial course, will apply as electives toward the required minimum of 192 hours, but will not apply to the natural sciences requirement.

4. Foreign Language Requirement

Courses taught at Ohio University which may be used to fulfill the language requirement are the African and Asian languages (Arabic, Chinese, Indonesian/Malaysian, Japanese, and Swahili), the classical languages (Greek and Latin), Germanic language (German), Romance languages (French, Italian, Portuguese, and Spanish), and Slavic language (Russian).

In each case, the numbers 111, 112, and 113 represent the first (beginning) year of the language and 211, 212, and 213 represent the second (intermediate) year.

Candidates for the A.B. Degree

The A.B. degree foreign language requirement is a complete two-year sequence through 213. The only exception to this is in the area of classical languages, where one year of Greek and one year of Latin will fulfill the requirement.

Two years of high school language can be equivalent to one year of college language. The student who has completed two or three years of one language in high school

and who wishes to complete the requirement in that language may do so according to the instructions in the table at the end of this section. The student with at least two years of high school Latin may also fulfill the requirement by passing GK 111-112-113 or LAT 211-212-213. Likewise, the student with at least two years of high school Greek may fulfill the requirement by passing LAT 111-112-113 or GK 211-212-213.

A student who has completed four or more years of one modern foreign language in high school may complete the foreign language requirement by passing course number 213, or any higher level course in that language. The student with four years of Latin in high school may elect to complete LAT 351 rather than 213. Of these, 351 is recommended.

Candidates for the B.S. Degree

The B.S. degree candidate may meet the foreign language requirement with proficiency in foreign language(s) equivalent to two years of college study. To determine individual requirements, the student should bear in mind that two years of high school study in a single language are considered equivalent to one year of that language at the college level. Therefore, the student who enters college with two years of preparation in each of two languages or four years in a single language may consider the requirement for the B.S. degree already filled. The student who has had two high school years in only *one* language may complete the requirement by taking the college intermediate year (211, 212, and 213)* in the same language or by taking the beginning year (111, 112, and 113) in a *second* language. Credit is not given toward meeting the foreign language requirement for the first and second quarters of a beginning or intermediate year unless the third quarter also is completed.

Note that the degree awarded (A.B. or B.S.) is determined by the major program, not by the student's choice. The A.B. degree is awarded to those who complete major programs in the humanities and social sciences and selected specially designed science programs; the B.S. degree is awarded only for specified science-oriented major programs (See listing in the *Degrees, Majors, and Minors* section preceding).

*Note that completion of the college-level beginning year of a language taken for two or three years in high school does not complete the requirement and that bypassing sequential courses is permitted only in accordance with this table.

Language Placement Table

Although the student will not lose credit if it is necessary to repeat high school language work, he or she is advised to begin college work in foreign languages according to the following table:

Years of language in high school:	Begin college language at:
0-1 year	Course 111.
2-3 years	Course 211.
4-5 years	Course 213.

If the student chooses to repeat high school language work, the credit earned applies, still, to the language requirement in the regular fashion, and does not apply to the humanities requirement.

Foreign Students

Upon entering Ohio University, a foreign student whose native language is not English may satisfy the foreign language requirement by demonstrating competence in English. This must be approved by the director of the Ohio Program of Intensive English and generally requires the

completion of at least one course in English as a foreign language. In some cases the student must seek from the chairman of the Department of Linguistics certification of his or her acceptable level of ability in a non-English language. The student may also satisfy the foreign language requirement by taking a foreign language other than his or her own.

Enrollment in beginning or intermediate level languages in one's native language(s) is not permitted. Credit will be disallowed for any courses completed in this circumstance.

5. Humanities Area Requirement*

The humanities requirement may be met by a selection of 18 quarter hours from two or more areas, with at least eight hours in one area, from among the following:

- a. AAS 110, 150, 210, 211, 250, 310, 350, 355, 356
- b. art history
- c. classical archaeology
- d. comparative arts
- e. Dance Cultures of the World (DANC 351, 352, 353); History of Dance (DANC 471, 472, 473); and Viewing 20th-Century Dance (DANC 170 and 370)
- f. English courses *except* ENG 150, a developmental course, and 151, 152, 153A, 153B, 160, Tier I courses.
- g. foreign language courses other than those used to complete the foreign language requirement
- h. Foreign Literatures in Translation (modern, classical) and Mythology
- i. Greek and Latin Words in the English Language (CLNG 127)
- j. HUM 107, 108, 109 or 307, 308, 309 (Great Books)
- k. HIST 121, 122, 123, 314A-F, 328, 329A-C, 330, 351, 352, 353A-B, 354, 356A-C, 357, 370, 389
- l. history and criticism of oratory
- m. history of theater
- n. philosophy *except* 120, a Tier I course
- o. music history and literature

6. Social Sciences Area Requirement*

The social science requirement may be met by a selection of 18 quarter hours from two or more areas, with at least eight hours in one area, from among the following:

- a. AAS 201, 202, 220, 225, 340, 360, 368, 440
- b. anthropology
- c. BUSL 255, 370, 442, and 475
- d. economics
- e. geography *except* 101, 301, 311, 312
- f. history *except* those listed under #5 k
- g. INST 103, 113, 121
- h. linguistics
- i. political science
- j. psychology *except* 226; 312; 314; 321; and 121, a Tier I course
- k. social work
- l. sociology

7. Natural Sciences Area Requirement*

The natural science requirement may be met by a selection of 18 quarter hours from two or more areas, with at least eight hours in one area, from among the following:

- a. astronomy
- b. botany
- c. chemistry *except* 115
- d. computer science *except* 120 and 220, a Tier I course
- e. GEOG 101, 301, 311, 312
- f. geological sciences
- g. mathematics *except* 101, a developmental course; 113, 117, 118, 120, 121, 151, Tier I courses; and 320, a methods course.
- h. microbiology
- i. physical sciences
- j. PSY 226, 312, 314
- k. physics
- l. zoology

Note: Methods courses are not applicable to the area requirements.

*The above listings (items 5, 6, and 7) must be used as the official guide for the completion of the Arts and Sciences area (distribution) requirements.

Some courses from these categories may be applied also to the University General Education Tier II (breadth of knowledge) requirements. However, the three Arts and Sciences area categories differ in scope from the five Tier II groupings (Fine Arts and Humanities, Natural Science and Mathematics, Applied Science and Technology, Social Science, and Third World Cultures). A student wishing to select a course that will apply simultaneously to both the Arts and Sciences and the Tier II General Education requirements must take care to choose a course which has been approved for the desired category in both the college and the University requirements. (The list of courses approved for each of the Tier II categories appears at the end of the University *Graduation Requirements* section of this catalog.) Note that courses which can fulfill the University Tier I quantitative skills and freshman composition requirements and the Tier III requirement do not apply to the Arts and Sciences area (distribution) requirements.

Exceptions to the Arts and Sciences area requirements or consideration for inclusion of courses not listed are not made on an *ad hoc* basis, but rather require formal approval of the Arts and Sciences Curriculum Committee.

8. Level of Study Requirement (Hours Above 200)

Within the total hours applied to the degree, at least 90 quarter hours of Arts and Sciences (liberal arts) courses must be above the freshman level; that is, they must be numbered 200 or above. Arts and Sciences courses are defined as those courses listed under humanities, social sciences, and natural sciences (#s 5, 6, and 7) above. This includes foreign language courses.

Education courses which are required for teacher certification may be applied toward the 200-level requirement only when the student has met all the requirements for teacher certification. These courses count also for the psychology major who plans to enter the graduate program in school psychology, upon written recommendation of the chairman of the Psychology Department certifying individual need and eligibility.

Students who *complete* the Mental Health Technology (MHT) Program and elect to pursue a four-year degree may apply the 200-level MHT courses to this requirement.

Economics majors may apply to the 200-level requirement a maximum of 15 hours from: QBA 201 and any advanced offering in statistics.

Non-Arts and Sciences courses are considered to be electives. These are not counted toward the 200-level requirement, but are counted toward graduation.

9. Total Hours Required and Credit Allowed

A minimum total of 192 quarter hours for credit is required for either degree. Only the final hours earned when courses are repeated count for graduation.

Noncredit courses (courses numbered below 100, courses completed after advanced-level work in the same field, certain technology courses, and credits duplicated by repetition of coursework) are not accepted toward the 192-hour requirement. The student should be aware that one may not repeat courses for the purpose of affecting one's grade-point average after the completion of higher-level courses in the same field. Also, coursework completed at another university cannot be used to repeat coursework taken at Ohio University.

No more than 72 hours in any one subject may be counted toward the A.B. degree; and no more than 80 hours in one subject may be counted toward the B.S. degree. See the *Guidelines and General Information* section of this catalog for a description of the residence requirement, which can, for some students, increase the total hours required.

10. Single Application of Credit

No course may satisfy more than one of the area requirements in foreign language, humanities, social sciences, natural sciences, or the major requirement. For example, a philosophy major may not apply any courses in philosophy toward the humanities requirement. (Courses required for a major but outside the major department—extradepartmental requirements—will be counted toward the area requirements.) However, the student majoring in a foreign language may apply courses at the beginning and intermediate levels of that language toward the language requirement since the language major is defined as including only those courses above the intermediate level. For teacher certification students, certain courses in the comprehensive major may fulfill requirements for the appropriate area; students will need to consult with their advisors on this point. Courses which can fulfill the University Tier I quantitative skills and *freshman* composition requirements and the Tier III requirement do not apply to the Arts and Sciences area (distribution) requirements.

11. Averages Required

In order to receive a degree from the College of Arts and Sciences, a student must have a minimum point-hour ratio of 2.0 on all of the following:

- a. All hours attempted at the college level.
- b. All hours attempted at the college level in the major.
- c. All hours attempted at Ohio University.
- d. All hours attempted at Ohio University in the major.

Only the final hours and points in repeated courses are counted for graduation. However, all courses including failures are included on the student's transcript. For repeated courses see the *Credit and Grading* section of this catalog. Note that the repeated course policy does not apply to the repetition of a course after a course for which it was a prerequisite has been completed. This restriction applies generally to repeating a course after higher-level work has been completed (see #9 above).

The graduation point-hour ratio is computed after deductions for repeated and noncredit courses have been made. Note also that courses taken at Ohio University and repeated at another school do not result in deduction of the first grade earned.

12. General Degree Information

a. Advising

The college prepares, on a quarterly basis, current degree information for each student in the form of graduation check sheets and lists of currently enrolled students grouped according to their declared majors. At advising and preregistration time each quarter, the student receives a copy of the check sheet and copies are given to the advisors, whose names are posted in the departmental offices. The student consults the list to identify his or her advisor and should meet with the advisor not only during preregistration, but regularly throughout the year when assistance concerning academic requirements and plans is needed.

It is hoped that the student will develop a close relationship with the advisor concerning the student's academic program. Any arrangements deviating from the major requirements as described in the *Courses of Instruction* section of this catalog must be communicated to the office of the dean in writing by the department chairman or the undergraduate advising coordinator for the appropriate department. The student should visit the dean's office when exceptional circumstances exist, upon referral by his or her advisor, to correct errors or change programs.

To change his or her major, the student must visit the office of the dean. A change of major is not accomplished by making a change on the registration form.

When the major is changed, the advisor is changed automatically by the college. All other matters pertaining to the assignment of advisors are administered by the departmental offices.

b. Degree in Absentia

A student who wishes to earn a degree *in absentia* must complete 144 quarter hours including the specific requirements for the chosen program at Ohio University. A point-hour ratio of 2.0 or better must be maintained on all work attempted and on all work in the major. The University General Education requirements and all college distribution requirements must be completed, except the 200-level requirement, of which at least 45 hours must be completed. A full year's work in an accredited school of dentistry, forestry, law, medical technology, medicine, optometry, physical therapy, or veterinary medicine must be completed, and the student must be advanced without condition to the second year of training at the professional school (when the program is for two or more years). Note that the *in absentia* privilege is not available for programs in Arts and Sciences other than those listed above. For the degree *in absentia*, the student must successfully complete the professional program specified.

For the medical technology program, the student must receive the approval of the medical technology advisor; and for any other *in absentia* programs, a statement must be secured from the dean of the college before the student enters the professional school granting the degree *in absentia* privilege. The student should bear in mind that admission to the professional schools is highly competitive, requiring high-level performance in the undergraduate program.

c. Double Major

The completion of at least one formal major is required for a degree. The completion of a second major is an option which any Arts and Sciences student may elect. In this case, the student must complete all requirements for each Arts and Sciences major as described in the *Courses of Instruction* section of this catalog. Courses in either major will not apply to the area requirements, but extradepart-

mental requirements (such as chemistry for a zoology major) will apply to the area requirements. Also, extradepartmental requirements and area requirements need not be duplicated. For example, completing two majors does not double the humanities requirement.

d. Dual Major

A student wishing to earn a dual major in two related fields must consult with the chairman of each department involved and the dean of the college. Most departments stipulate that the student must complete the requirements for the full major in both areas even though he or she is pursuing a dual major. Courses taken in either or both of the fields, even though not required for the major, cannot be used to complete the general distribution requirements in foreign language, humanities, social sciences, or natural sciences. The College of Arts and Sciences requires a minimum of 23 quarter hours (including nine hours at the 400-level) beyond the introductory course in each field. Specific requirements are left to the discretion of the departments concerned.

e. Pass/fail

Ohio University policy prohibits taking required coursework on the pass/fail basis. For the Arts and Sciences student, this means that courses which can apply to the foreign language, humanities, social sciences, natural sciences, major, minor, 200-level, and special curricula requirements cannot be taken pass/fail until those requirements are completed. This applies as well to the requirements for the associate in applied science degree program, effectively limiting the pass/fail option in all programs to strictly elective coursework.

The student may complete a maximum of 20 hours of free elective coursework on the pass/fail basis.

f. Second Bachelor's Degree

The A.B. or B.S. degree is granted only once by the College of Arts and Sciences to a given student. The student, however, may complete additional majors within the degree program or may earn both the A.B. and B.S. degrees or may earn degrees from separate degree-granting colleges. For the guidelines for earning a second bachelor's degree, see the *Graduation Requirements* section of this catalog. Note that the College of Arts and Sciences requires the completion of a minimum of 240 quarter hours for the second degree (48 hours beyond the 192 hours required for the first degree), including all specific requirements for both degree programs.

g. Teacher Certification

Students earning either bachelor of arts or bachelor of science degrees in the College of Arts and Sciences may meet the special requirements for certification to teach in the secondary schools in Ohio by completing the regular requirements for the appropriate A.B. or B.S. degree program plus the additional requirements for certification. Information about the certification requirements can be obtained from the Office of Student Personnel Services in Education in the College of Education.

h. Time and Resident Course Load Limitations

The student's requirements are defined by the catalog in effect when he or she begins study in a given program (when he or she first registers at Ohio University). Upon the expiration of five years past the date of entry, the requirements become defined by the current catalog. (See the *Graduation Requirements* section of this catalog.)

The student should bear in mind that an average course load of 16 hours per quarter is considered the standard load for graduation after four years of full-time study and that a course load in excess of 20 hours in a given quarter results in an increase in the tuition fee for that quarter. Also, the student should become familiar with the residence requirements which stipulate the minimum amount of work which must be completed at Ohio University in order to receive a degree from this institution (see the *Graduation Requirements* section of this catalog).

Students who have requirements which involve courses numbered below 300 should start meeting such requirements not later than the beginning of the sophomore year. This is strongly recommended in the case of foreign language. Registration by juniors or seniors in courses numbered below 300 is discouraged and in some cases it is prohibited.

i. Transfer and Transient Study

To determine the transferability of credit from other institutions, the college follows the policy of accepting credit only from institutions which are accredited or are recognized candidates for accreditation by one of the regional associations as reported by the American Association of Collegiate Registrars and Admissions Officers (AACRAO). The college follows the recommendations of AACRAO in recognizing transfer credit. In the case of credit from foreign institutions and other special cases, the college accepts the recommendations of the university examiner in the Office of Admissions.

When transfer work can be accepted according to the above conditions, the college evaluates the credits on a course-by-course basis, assigning Ohio University course numbers wherever possible. This enables the student to view the transfer credit as though it had been completed at Ohio University and thereby determine his or her status relative to completing requirements for graduation simply by becoming familiar with those requirements and deducing which ones have yet to be completed.

In the case of technical credits, which are not like most courses offered at the baccalaureate level by four-year institutions, the college evaluates these courses as technical electives (TECE) at the appropriate level and will accept up to 25 hours of technical electives in programs where there is room for free electives. These credits will apply as hours of credit toward the 192 hours required for graduation, but will not fulfill any specific degree requirements. Some of our programs have very little room for free electives and therefore the potential benefit of this coursework can be considerably less than the maximum 25 hours. In several cases, especially for programs in the humanities and social sciences, the student can take maximum advantage of the allowable credit.

The student attending a two-year school is advised to complete coursework in English composition and as many courses as possible in college-level mathematics (college algebra and above) and science (biology, chemistry, geology, and physics); humanities (English language and literature, philosophy, comparative arts); and social sciences (sociology, geography, history, political science, psychology, economics, anthropology). This will improve greatly the student's chances of being able to complete the chosen four-year program after completing the two-year program. Students also should remember that in most cases, it is *not* advisable to complete more than two years of work at the two-year school (96-100 credit hours) if they plan to finish the baccalaureate program with two more years of work at Ohio University.

A transfer student is required to complete at least 12 quarter hours toward the major in courses at the 300 level or above in the major department at Ohio University, with

a point-hour ratio of at least 2.0. These courses should be approved by the department chairperson. A transfer student completing the dual major is required to complete at least nine quarter hours at the 300 level or above in each of the two departments at Ohio University, with a point-hour ratio of at least 2.0 in each department. These courses should be approved by the chairpersons of the two departments involved.

The transfer student or student earning credit by transient study should keep in mind that, in order to receive a degree, he or she must have a 2.0 or better average on all work done at Ohio University and on all work done in the major at Ohio University (see #10 above).

The transfer student should note the residence requirement which stipulates that a minimum of 48 final hours (one full year) must be completed with residence credit.

The senior student wishing to earn credit by transient study should keep in mind that he or she must complete the final 16 hours in residence at Ohio University if 96 or more hours were previously earned in residence. If fewer than 96 hours were earned in this manner, the final residence requirement is 48 hours.

The student wishing to arrange to earn credit by transient study must secure approval from the dean prior to registering. This permits review and clarification of requirements and procedures and prevents loss of credit.

The student is encouraged to read the *Graduation Requirements* and *Credit and Grading* sections of this catalog for general University academic information, including information about General Education requirements, the grading system, probation, credit hour loads, and residence requirements.

SPECIAL CURRICULA

Among the special curricula which follow, the four-year degree programs represent curricula which are structured in a way that will help the student prepare for a specific application of his or her undergraduate program to a selected educational or career objective. The student completing a given program will earn the major indicated in each case. For example, the student completing a formal premedicine program will graduate with a major in chemistry-premedicine or zoology-premedicine.

To be recognized as having completed a special curriculum and in order to complete graduation requirements, the student must complete the entire curriculum as listed, plus additional courses as necessary to complete a total of at least 192 hours, the University General Education, and the Arts and Sciences degree requirements. Should the student elect not to complete the special curriculum, then he or she, in order to complete the requirements for a major, must complete the requirements for the major as indicated in the *Courses of Instruction* section.

Preparation for Advanced Training in Astronomy

(Physics-Preastronomy Major, major code #3335)

The following program will lead to the B.S. degree with a physics major and will provide the background required for admission to graduate school in astronomy.

Freshman

English composition	5
MATH 263A1, 263B, 263C Analyt. Geom. & Calc.	15
PHYS 2511, 252 Gen. Phys.	10
Arts and Sciences degree requirements (including language), University General Education requirements, and/or electives.	

Sophomore

MATH 340 Diff. Equations	5
MATH 410 Matrix Theory	5
MATH 441 Fourier Analys. & Partial Diff. Equations	5
MATH 450A, 450B Theory of Stat.	10
PHYS 253 Gen. Phys.	5
PHYS 272, 273 Electron. Lab.	4
PHYS 316 Contemp. Phys.	3
Arts and Sciences degree requirements (including language), University General Education requirements, and/or electives.	

Junior

ASTR 300 Solar System	3
ASTR 301 Sun & Stars	3
ASTR 302 Stars & Galaxies	3
ASTR 310, 311, 312 Astronomy Lab.	3
PHYS 311, 312 Mechanics	8
PHYS 371 Interm. Lab. (Electrons)	2
PHYS 372 Interm. Lab. (Photons)	2
PHYS 373 Interm. Lab. (Nucleons)	2
PHYS 423 Optics	4
PHYS 451, 452 Quantum Phys.	8
PHYS 453 Nuclear & Particle Phys.	4
English composition	5
Arts and Sciences degree requirements (including language), University General Education requirements, and/or electives.	

Senior

ASTR 350 Celestial Mechanics	4
ASTR 450 Studies in Astronomy	8
PHYS 411 Thermodynamics	4
PHYS 412 Kinetic Theory & Stat. Mechanics	4
PHYS 427, 428, 429 Elec. & Magnetism	11
Arts and Sciences degree requirements (including language), University General Education requirements, and/or electives.	

For students in the Honors Tutorial Program, special combinations of some of the above courses are available.

†Physics courses complete the physics major requirements.

‡Math and astronomy courses complete the natural sciences requirement.

Preparation for Advanced Training in Botany

(Botany-Advanced Training Major, major code #2116)

This program is intended for students who plan eventually to obtain advanced degrees in botany. Although the program as outlined below is adequate for the needs of most students, all interested students should be certain to consult with an advisor in the Department of Botany for individual assistance in program planning.

Freshman

BOT 110, 111 Intro. to Bot.	12
CHEM 141, 142 Fundamentals of Chem.	10
CHEM 143 Quant. Analys.	5
MATH 263A, 263B, 263C Analyt. Geom. & Calc.	15
ZOOL 151 Intro. to Zool.	6
Arts and Sciences degree requirements (including language), University General Education requirements, and/or electives.	

Sophomore

BOT 307 Morph. of Algae & Bryophytes	6
BOT 308 Morph. of Vascular Plants	6
BOT 309 Plant Systematics & Ohio Flora	5
BOT 310 Biol. of Fungi	5
CHEM 305, 306, 307, 308, 309 Organic Chem.	15
Arts and Sciences degree requirements (including language), University General Education requirements, and/or electives.	

Junior

BOT 424 Plant Physiology	6
BOT 431 Cell Biology	5
PHYS 201, 202, 203 Intro. to Physics	12
ZOOL 325 Gen. Genetics	5
Arts and Sciences degree requirements (including language), University General Education requirements, and/or electives.	

Senior

BOT 405 Discussions about Biol.	2
BOT 425 Plant Ecol.	5
BOT 475 Plant Speciation & Evolution	3
Arts and Sciences degree requirements (including language), University General Education requirements, and/or electives.	

Preparation for Advanced Training in Mathematics

(Mathematics-Advanced Training Major,
major code #3102)

Students who envision eventually doing mathematics graduate work can ensure adequate preparation by building their programs around the basic mathematics offerings listed below. In addition, some computer science experience and coursework from the physical sciences is recommended. Interested students should consult an advisor in the Mathematics Department for assistance in planning their programs.

Freshman

MATH 263A, 263B, 263C Analyt. Geom. & Calc.	15
Arts and Sciences degree requirements (including language), University General Education requirements, and/or electives.	

Sophomore

MATH 211 Elem. Linear Algebra	5
AND/OR	
MATH 214 Elem. Abstract Algebra	5
MATH 340 Diff. Equations	5
MATH 360 Interm. Analys.	5
Arts and Sciences degree requirements (including language), University General Education requirements, and/or electives.	

Junior-Senior

MATH 413A, 413B Intro. to Mod. Algebra	10
AND/OR	
MATH 460A, 460B, 460C Adv. Calc.	15
MATH 480A, 480B Elem. Point Set Topology	10
Arts and Sciences degree requirements (including language), University General Education requirements, and/or electives.	

The student also is encouraged to select some other 400-level mathematics electives as time and interest permit. Some suggestions are: 470; 450A, B; 440; 441.

Preparation for Advanced Training in Physics

(Physics-Advanced Training Major, major code #3334)

This is a demanding program for students interested in eventually getting advanced degrees in theoretical or experimental physics. However, there are included courses which would equip the graduate for career opportunities in industrial and government laboratories. Students should also consult the physics curricula and courses in the *Courses of Instruction* section of the catalog and should consult the chairman about this program in their freshman year.

Freshman

MATH 263A*, 263B*, 263C* Analyt. Geom. & Calc.	15
PHYS 251*, 252* Gen. Phys.	10
English composition	5
Arts and Sciences degree requirements (including language), University General Education requirements, and/or electives.	

Sophomore

MATH 340* Diff. Equations	5
MATH 440* Vector Analys.	5
MATH 441* Fourier Analys. & Partial Diff. Equations	5
PHYS 303** Digit. Comput. Methods in Phys.	4
PHYS 253* Gen. Phys.	5
PHYS 272*, 273* Electron. Lab.	4

PHYS 316 Contemp. Phys.	3
Natural science**	12
Arts and Sciences degree requirements (including language), University General Education requirements, and/or electives.	

Junior

MATH 410† Matrix Theory	5
MATH 470† Appld. Complex Variables	5
PHYS 311*, 312* Mechanics	8
PHYS 371* Interm. Lab. (Electrons)	2
PHYS 372* Interm. Lab. (Photons)	2
PHYS 373* Interm. Lab. (Nucleons)	2
PHYS 420 Acoustics (Odd years)	3
PHYS 423 Optics	4
PHYS 451*, 452* Quantum Phys.	8
PHYS 453 Nuclear & Particle Phys.	4
English composition	5
Arts and Sciences degree requirements (including language), University General Education requirements, and/or electives.	

Senior

PHYS 427*, 428*, 429† Elec. & Magnetism	11
PHYS 475** Adv. Lab. (Each of three quarters)	3-9
PHYS 411* Thermodynamics	4
PHYS 412 Kinetic Theory & Stat. Mechanics	4
PHYS 420 Acoustics (Odd years)	3
PHYS 471 Solid State Phys.	4
PHYS 493 Undergraduate Seminar	1
PHYS 621 Intro. Quantum Mechanics	5
PHYS 622† Intro. Quantum Mechanics	5
Arts and Sciences degree requirements (including language), University General Education requirements, and/or electives.	

Note: PHYS 251, 252, 253 recommended, but PHYS 201, 202, 203 possible. This alternative is to be followed by PHYS 315.

†12 hours of natural science other than physics and mathematics are required.

*Required for the B.S. degree in physics.

**Recommended.

†Recommended for those physics majors wishing to pursue graduate studies in physics.

Preparation for Agri-Business

(Botany—Agri-Business Major, major code #2117)

This program is a modification of the Preparation for Environmental Biology (Botany Emphasis) program for students interested in applying their knowledge about the plant sciences and the environment to business and industrial situations.

1. Required BOT courses: 110*; 111*; 247; 248; 309; 404; 420; 424; 425 OR 426; 410 OR MICR 211, 212 OR MICR 411
2. Required non-departmental courses
 - a. CHEM 141, 142, 143, 301, 302
 - b. ZOOL 151, 325
 - c. PHYS 201, 202, 203
 - d. MATH 163A
 - e. Either MATH 250B OR PSY 121
 - f. Either CS 220 OR CS 230 OR CS 322
 - g. GEOL 101 and three courses from the following:
GEOG 101, GEOG 201, GEOG 260 OR GEOG 365,
GEOG 311 OR GEOG 312, GEOG 327, GEOL 211,
GEOL 310, GEOL 330
 - h. Completion of the Minor in Business Administration
 - i. Completion of Arts and Sciences degree requirements and University General Education requirements.

*Under special circumstances and only with the approval of the Department of Botany undergraduate advising coordinator, BOT 101 and 102 may be considered for substitution for BOT 110 and 111 respectively.

Preparation for Animal Behavior

(Zoology/Animal Behavior Major, major code #2511)

The Program in Ecology, Behavior, and Evolution, in the Department of Zoological and Biomedical Sciences, offers a program for undergraduate zoology majors inter-

ested in the study of animal behavior. This program furnishes a background for students preparing for advanced study in graduate school. Upon completion of graduate study, academic careers as well as research and administrative positions in wildlife programs or zoological parks are possible.

Freshman

BOT 111 Intro. to Botany	6
CHEM 141, 142, 143 Fund. of Chem.	10
PSY 101 Intro. to Psych.	5
PSY 121 Elem. Stat.	5
ZOOL 150, 151 Intro. to Zool.	12
English composition	5
Arts and Sciences college degree requirements, University General Education requirements, and/or electives.	

Sophomore

CHEM 301, 302 Organic Chem.	6
MATH 163A, 163B Intro. to Calc.	8
PHYS 201, 202 Intro. to Phys.	8
ZOOL 325 Genetics	5
ZOOL 373 Human Behavior	5
ZOOL 376 Ecology Lab.	3
Arts and Sciences college degree requirements, University General Education requirements, and/or electives.	

Junior-Senior

ZOOL 460 Animal Physiology	5
ZOOL 466 Comp. Neurophysiology	4
ZOOL 473 Animal Behavior	5
ZOOL 477 Population Ecology	4
ZOOL 479 Evolution	4
English composition	4-5

plus, at least 3 courses from the following electives:

ZOOL 303 Comp. Vert. Anat.	6
ZOOL 430 Invert. Zool.	6
ZOOL 434 Biol. of Spiders	5
ZOOL 435 Gen. Entomology	6
ZOOL 440 Sociobiology	4
ZOOL 467 Neurophysiology Lab.	2
ZOOL 468 Ichthyology	4
ZOOL 471 Ornithology	3
ZOOL 472 Herpetology	5
ZOOL 474 Mammalogy	6

Preparation for Animal Systematics

(Zoology/Animal Systematics Major, major code #2512)

The Program in Ecology, Behavior, and Evolution, in the Department of Zoological and Biomedical Sciences, provides a program for undergraduate zoology majors interested in careers or graduate education emphasizing animal systematics. This program will provide the necessary background for students preparing for graduate school or careers in animal systematics, evolutionary biology, natural history, museum curation, etc.

Freshman

BOT 111 Intro. to Bot.	6
CHEM 141, 142, 143 Fund. of Chem.	15
PSY 121 Elem. Stat.	5
ZOOL 150, 151 Intro. to Zool.	12
English composition	5
Arts and Sciences college degree requirements, University General Education requirements, and/or electives.	

Sophomore

CHEM 301, 302 Organic Chem.	6
MATH 163A, 163B Intro. to Calc.	8
PHYS 201, 202 Intro. to Phys.	8
ZOOL 303 Comp. Anat.	6
ZOOL 325 Genetics	5
ZOOL 376 Ecology Lab.	3
Arts and Sciences college degree requirements, University General Education requirements, and/or electives.	

Junior-Senior

ZOOL 457 Animal Systematics	4
ZOOL 460 Animal Physiology	5
ZOOL 477 Population Ecology	4
ZOOL 479 Evolution	4
English composition	4-5
plus, at least 4 courses from among the following electives:	
MICRO 411 Gen. Microbiology	6
ZOOL 404 Comp. Vert. Anat.	6
ZOOL 430 Invert. Zool.	6
ZOOL 439 Field Entomol.	5
ZOOL 468 Ichthyology	4
ZOOL 471 Ornithology	3
ZOOL 472 Herpetology	5
ZOOL 474 Mammalogy	6

Preparation in Applied Mathematics

(Mathematics-Applied Major, major code #3103)

This program offered by the Department of Mathematics leads to a B.S. degree in mathematics and allows an emphasis on applications of mathematics to some other disciplines. A student in this program is encouraged to elect a secondary area of concentration in one of the areas of engineering, natural science, or social science. Many options are available. The particular program will vary with the student's interests and needs. An advisor will be assigned to assist each student in designing a suitable plan. The student should ask the chairman of the Department of Mathematics for further information regarding this program. The mathematics coursework for two example study plans is given below.

Example A: For those whose secondary area of concentration is in economics, computer science, or industrial and systems engineering, a suggested plan includes:

Freshman

MATH 263A, 263B, 263C Analyt. Geom. & Calc.	15
English composition	5
Arts and Sciences degree requirements (including language), University General Education requirements, and/or electives.	

Sophomore

CS 201 or 201A Intro. to Computing	5
MATH 340 Diff. Equations	5
MATH 360 Interim. Analys.	5
Arts and Sciences degree requirements (including language), University General Education requirements, and/or electives.	

Junior

MATH 410 Matrix Theory	5
MATH 450A, 450B Theory of Statistics	10
English composition	4-5
Arts and Sciences degree requirements (including language), University General Education requirements, and/or electives.	

Senior

MATH 442 Theory of Linear Programming & Nonlinear Programming	5
MATH 444 Intro. to Numerical Analys.	5
MATH 460A, 460B Adv. Calc.	10
Arts and Sciences degree requirements (including language), University General Education requirements, and/or electives.	

Example B: For those whose secondary area of concentration is in mechanical, civil, chemical, or electrical engineering, or in chemistry or physics, a suggested plan includes:

Freshman

MATH 250B Finite Math.	5
MATH 263A, 263B, 263C Analyt. Geom. & Calc.	15
Arts and Sciences degree requirements (including language), University General Education requirements, and/or electives.	

Sophomore

MATH 340 Diff. Equations	5
MATH 360 Interim. Analys.	5

MATH 440 Vector Analys.	5
Arts and Sciences degree requirements (including language), University General Education requirements, and/or electives.	

Junior

MATH 410 Matrix Theory	5
MATH 441 Fourier Analys. & Partial Diff. Equations	5
MATH 470 Appld. Complex Variables	5
Arts and Sciences degree requirements (including language), University General Education requirements, and/or electives.	

Senior

MATH 444 Intro. to Numerical Analys.	5
MATH 450A, 450B Theory of Stat.	10
OR	
MATH 460A, 460B Adv. Calc.	10
Arts and Sciences degree requirements (including language), University General Education requirements, and/or electives.	

Preparation in Applied Physics

(Physics-Applied Major, major code #3332)

This four-year program offered in the Department of Physics leads to a B.S. degree in physics and allows an emphasis in experimental techniques together with engineering or other applied sciences. Such a program offers a broad basic education in several areas fundamental to present technology and is aimed at preparing students for many physics career opportunities in industry or government laboratories.

The particular sequence of courses will vary with the student's interests. The required courses in natural science, physics, and mathematics are the same as those for students preparing for advanced training in physics. Students may then elect a sequence of courses in physics together with engineering, chemistry, or biology which are more applied in nature. Some examples of courses which may be included are: IT 101 and 102 — Engineering Drawing, CHE 331 — Principles of Engineering Materials, CE 423 — Continuum Mechanics, CE 340 — Fluid Mechanics, ME 407 — Fundamentals of Nuclear Engineering, CHE 433 — Physical Metallurgy, PHYS 475 — Advanced Lab, PHYS 420 — Acoustics, PHYS 471 — Solid State Physics, and PHYS 470 — Special Problems.

Interested students should consult the chairman of the Department of Physics and Astronomy for assistance in planning their programs.

Preparation for Applied Plant Sciences

(Botany-Applied Plant Sciences Major, major code #2114)

The Department of Botany offers this preprofessional program designed to provide students with a broad base for developing careers in horticulture, plant pathology, plant breeding, greenhouse management, or agricultural sciences. This program also prepares students for graduate studies in the above disciplines as well as for areas such as integrated crop management, integrated pest management, landscaping, and agronomy.

Students who wish to include a minor in business administration with this program should consult with an advisor in the Department of Botany.

1. Required BOT courses: 110*, 111*, 248, 309, 331, 410, 412, 424, 425 OR 426
2. Additional BOT courses are to be selected from the following to make a total of 55 hours in botany: 305, 308, 310, 312, 315, 352, 425 OR 426
3. Required non-departmental courses
 - a. ZOOL 151, 325, 435
 - b. CHEM 141, 142, 143, 301, 302
 - c. PHYS 201, 202
 - d. One of the following combinations
 - (1) MATH 163A and 163B

- (2) PSY 121 and one course from CS 220, 230, or 322
 (3) MATH 250B and one course from CS 220, 230, or 322

e. University General Education and Arts & Sciences bachelor of science degree requirements.

*Under special circumstances and only with the approval of the Department of Botany undergraduate advising coordinator, BOT 101 and 102 may be considered for substitution for BOT 110 and 111 respectively.

Minor in Business Administration

Arts and Sciences students often plan careers in business, but choose their college majors because of interest in a given subject and a desire to secure a traditional, liberal arts education. This is widely recognized as a good approach for the good student. Liberal arts graduates prove to be well-informed and well-educated members of their organizational teams.

Surveys have shown, though, that executives see value in combining specific business coursework with the liberal arts program, enabling the prospective employee to learn methodologies, processes, and ideas common to the world of organizational work.

To enhance the job opportunities in business for the nonbusiness major, the colleges of Business Administration and Arts and Sciences have devised a formal minor in business administration. This unusual program has been well-received by the business community, and has become a popular option for Arts and Sciences students. Successful completion of the program is indicated on the student's permanent record.

The requirements for the business administration minor consist of 36 or more credit hours, including two courses each in accounting and economics and at least one course in each of the following areas: A. finance, B. management, C. marketing, D. production, and E. statistics.

ACCT 201 and 202 and ECON 101 and 102 are required. Courses recommended for completion of the remaining requirements are: A. FIN 325 (4); B. MGT 200 or 300 (4); C. MKT 301 (4); D. BA 310 (4); and E. PSY 121 or ECON 381 or QBA 201, or an equivalent (4-5).

The student should be aware that selecting certain options can result in an increase in hours because of prerequisites.

The student should note also that ECON 101, 102 and BUSL 255 will apply simultaneously to the Arts and Sciences social sciences requirement and the University General Education Tier II social sciences requirement. PSY 121 will apply to the University Tier I quantitative skills requirement, and ECON 381 to the Arts and Sciences social sciences requirement.

Arts and Sciences majors who wish to enroll in the program should register with the Undergraduate Student Affairs Office of the College of Arts and Sciences.

Preparation for Cartography

(Geography - Cartography Major, major code #4236)

Cartography, the art and science of map making, is an integral part of geography. The spatial perceptions of geographers are translated into map form via various cartographic techniques. Cartography, in recent years, has become a major career objective within geography.

This program addresses both the academic and technical phases of cartography with the expressed purpose of leading to actual application and practical experience. The latter is accomplished through a practicum and employment in the Ohio University Cartographic Center (OUCC), an extension of the cartography program and the Geography Department.

The preparation for cartography program stresses a strong background in geography, emphasizes cartog-

raphy related courses, and complements these courses with specific courses from related areas. Graduates from this program will have an added advantage in the job market.

Core Curriculum: (62 credit hours)

Geography: (54 hours)

GEOG 101 Elements of Physical Geography	5
GEOG 121 Elements of Cultural Geography	4
GEOG 130 Economic Geography	4
GEOG 201 Environment and Man	4
GEOG 260 Map Reading and Interpretation	4
GEOG 277 Analysis of Geographical Data	5
GEOG 311 Elements of Meteorology	5
GEOG 360 Map-Making	5
GEOG 361 Statistical Cartography	5
GEOG 365 Air Photo Interpretation	4
GEOG 460 Advanced Cartography	5
GEOG 470 Development of Geographic Thought	4

Plus a choice of two from this list: (8 hours)

GEOG 230 Introduction to Urban Geography	4
GEOG 325 Systematic Political Geography	4
GEOG 422 Population Geography	4

Recommended Options:

GEOG 485 Internship	5
GEOG 486 Practicum	2-5

University General Education:

Tier I, Tier II, and Tier III requirements

English 151 should be selected for the freshman composition requirement.

Courses to fulfill area requirements of the College of Arts and Sciences

Language Requirement: (24 hours)

Arts & Sciences language requirement

Humanities Requirement: (18 hours)

Arts & Sciences humanities requirement

Social Science Requirement: (18 hours)

ECON 101 Principles of Macro-Economics	4
ECON 102 Principles of Micro-Economics	4
ANTH 101 Intro. to Cultural Anthropology	5
Additional items from the approved Arts & Sciences list	

Natural Science Requirement: (29-30 hours)

Mathematics:

MATH 118 Elementary Applied Math where necessary	4
MATH 163A, 163B Introduction to Calculus	9
OR	
MATH 263A, 263B Analytic Geometry and Calculus	10

Computer Science:

CS220 Introduction to Computing	5
At least 1 additional course	5

Geological Sciences:

GEOG 101 Introduction to Geology	5
GEOG 330 Principles of Geomorphology	5

Additional Requirements:

CE 210 Plane Surveying	4
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Preparation for Cell Biology

(Botany Major, major code #2118)

The Department of Botany offers a program in cell biology for those students interested in pursuing a profession in biotechnology or biology at the cellular or molecular level. This program can provide a sound basis for a technical career or for further study at the graduate level with a view to a career in research or teaching. As well as following closely the coursework outlined here and the requirements of the College of Arts and Sciences, students

entering this program will be encouraged to elect additional coursework from the general field of biology appropriate to their chosen interest. Individual students should plan their programs in close consultation with an advisor in the Department of Botany.

Freshman

BOT 110, 111 Intro. to Bot.	12
CHEM 141, 142 Fundamentals of Chem.	10
CHEM 143 Quant. Analys.	5
ENG 151 Fr. Comp.: Wrting. & Rhet.	5
MATH 250A, 250B Finite Math.	10
OR	
MATH 263A, 263B Analyt. Geom. & Calc.	10
ZOOL 151 Intro. to Zool.	6
Arts and Sciences degree requirements (including language), University General Education requirements, and/or electives.	

Sophomore

BOT 309 Plant Systematics & Ohio Flora	5
CHEM 305, 306, 307, 308, 309 Organic	15
PHYS 201, 202, 203 Intro. to Phys.	12
ZOOL 325 Gen. Genetics	5
Arts and Sciences degree requirements (including language), University General Education requirements, and/or electives.	

Junior-Senior

BOT 312 Plant Anat.	5
BOT 404 Undergrad. Research	4
BOT 405 Discussions about Biol.	2
BOT 424 Plant Physiology	6
BOT 426 Physiological Plant Ecol.	5
BOT 431 Cell Biology	5
BOT 475 Plant Speciation & Evolution	3
CHEM 351 Physical Chem.	4
CHEM 490, 491, 492 Intro. Biochem.	9
MICR 411 Gen. Micro	6
ZOOL 460 Animal Physiology	4
Arts and Sciences degree requirements (including language), University General Education requirements, and/or electives.	

Preparation in Creative Writing

(English-Creative Writing Major, major code #5232)

By combining selected creative writing courses with the regular English major, the student may complete a special program in creative writing. For the specific requirements, see English Language and Literature in the *Courses of Instruction* section of this catalog.

Preparation for Criminology

(Sociology-Criminology Major, major code #4253)

The Criminology Special Curriculum is designed for those students who would like to work in some aspect of the criminal justice system (e.g., probation, parole, or law enforcement) yet wish to receive a liberal arts education. Students completing the program may wish to consider employment in criminal justice or further study in law, criminology, or criminal justice. Students who complete the program will receive a degree in sociology with the emphasis in criminology noted.

Students are encouraged to enter the program as freshmen to facilitate completion in four years.

Freshman

PSY 101 Gen. Psych.	5
SOC 101 Intro. to Soc.	5
Criminology Elective Group* (See below)	4-8
English composition	5
Arts and Sciences degree requirements (including language), University General Education requirements, and/or electives.	

Sophomore

PSY 337 Social Psych. of Justice	4
SOC 361 Deviant Behavior	4
SOC 362 Criminology	4

Criminology Elective Group	4-8
Arts and Sciences degree requirements (including language), University General Education requirements, and/or electives.	

Junior

SOC 350 Social Stat.	4
OR	
SOC 351 Research Techniques	4
SOC 363 Juvenile Delinquency	4
SOC 366 Penology	4
SOC 403 Devel. of Sociological Thought	4
OR	
SOC 404 Modern Soc. Theory	4
Criminology Elective Group	4-8
English composition	5
Arts and Sciences degree requirements (including language), University General Education requirements, and/or electives.	

Senior

Criminology Elective Group	4-8
Student must complete 8-14 hours from the following:	
PHIL 442 Phil. of Law	5
POLS 404 Civil Liberties	4
POLS 409 Law Enforcement	4
POLS 471 Legal Theo. & Social Probs	4
PSY 332 Abnormal Psych.	4
Arts and Sciences degree requirements (including language), University General Education requirements, and/or electives.	
Total hours required: Minimum 63; Maximum 85.	

*Student must complete four sociology courses from the Criminology Elective Group which consists of SOC 201, 211, 329, 331, 365, and 464 for a total of 16 hours.

Preparation for Dentistry

No specific area for the major is required by the dental colleges or by Ohio University. The student must present preparation in various basic sciences, and many students do complete a major in one science or a dual major in two sciences. Many dental schools now require at least a year of behavioral and social sciences as well as a year of English. (Refer to courses recommended to fulfill these requirements following the Zoology Major Program, code #2501.)

Currently, most dental schools are selecting students with bachelor's degrees; a very limited number who have completed three years and have met the degree *in absentia* privilege requirements are admitted.

All dental school applicants are required to take the Dental Aptitude Test, offered during the academic year previous to the time the student plans to enroll in dentistry, preferably not later than the fall testing date.

(Chemistry-Predentistry Major, major code #3312)

Predentistry students wishing to major in chemistry should follow the program for the premedical chemistry major.

(Zoology-Predentistry Major, major code #2501)

The following sequence of courses is required for pre-dentistry students majoring in zoology. Additional selections from the recommended electives listed after the junior-senior program are encouraged. Students who elect the degree *in absentia* option must complete a minimum of 36 hours in zoological and biomedical sciences; those who elect the four-year program must complete a minimum of 45 hours in zoological and biomedical sciences.

Freshman

CHEM 141 Fundamentals of Chem.	5
CHEM 142 Fundamentals of Chem.	5
CHEM 143 Quant. Analys.	5
English composition	5
MATH 163A, B Intro. to Calc.	8
OR	
MATH 263A, B Analyt. Geom. & Calc.	10

ZOOL 150, 151 Intro. to Zool. 12
Arts and Sciences degree requirements, University General Education requirements, and/or electives. (English and comparative arts are recommended.)

Sophomore

CHEM 301, 302 Organic (short) 6
OR
CHEM 305, 306, 307 Organic (long) 9
PHYS 201, 202, 203 Intro. 12
ZOOL 303 Compar. Vert. Anat. 6
ZOOL 325 Gen. Genetics 5
Language if needed 12
Recommended: PSY 121 or MATH 250B, IT 109

Junior

CHEM 303, 304 Organic Lab (short) 5
OR
CHEM 308, 309 Organic Lab (long) 6
ZOOL 448* Cell Physiology (recommended, not required) 4
English composition 5
Language if needed 12
Arts and Sciences degree requirements, University General Education requirements, as needed.

Junior-Senior

CHEM 489 Basic Biochem. 4
OR
CHEM 490, 491 Intro. Biochem. 6
ZOOL 460* Animal Physiology 4
OR
ZOOL 463 Cell Chemistry 4

*Either ZOOL 448 or 460 is required.

Other zoology courses strongly recommended: 326, 404, 406, and MICR 411.

Recommended behavioral and social sciences: ANTH 101 or 370, 355; PSY 231, 273, 332, 336; sociology and computer science courses.

Recommended humanities: CLNG 127, philosophy, literature, comparative arts.

Preparation for Entomology

(Zoology/Entomology Major, major code #2513)

The Program in Ecology, Behavior, and Evolution, in the Department of Zoological and Biomedical Sciences, provides a program for undergraduate students in zoology who are interested in entomology. This program will provide the necessary background for students preparing for advanced study.

Freshman

BOT 111 Intro. to Bot. 6
CHEM 141, 142, 143 Fund. of Chem. 15
PSY 121 Elem. Stat. 5
ZOOL 150, 151 Intro. to Zool. 12
English composition 5
Arts and Sciences degree requirements, University General Education requirements, and/or electives.

Sophomore

CHEM 301, 302 Organic Chem. 6
MATH 163A, 163B Intro. to Calc. 8
PHYS 201, 202 Intro. to Phys. 8
ZOOL 325 Genetics 5
ZOOL 375 Animal Ecology 3
ZOOL 376 Ecology Lab. 3
Arts and Sciences degree requirements, University General Education requirements, and/or electives.

Junior-Senior

ZOOL 435 Gen. Entomology 6
ZOOL 437 Medical Entomology 4
ZOOL 439 Field Entomology 5
ZOOL 460 Animal Physiology 5
ZOOL 473 Animal Behavior 5
ZOOL 475 Animal Systematics 4

ZOOL 477 Population Ecology 4
ZOOL 479 Evolution 4
ZOOL 482 Topics in Zool. (Entomology) 3
English composition 4-5

Plus at least one course from the following electives:

MICR 411 Gen. Micro. 6
ZOOL 430 Invertebrate Zool. 6
ZOOL 431 Limnology 4
ZOOL 434 Biol. of Spiders 5
ZOOL 474 Mammalogy 6

Preparation for the Study of the Environment

The study of the environment includes the physical nature of the planet as well as plant and animal interactions involving space, land, water, and other living organisms. Within the College of Arts and Sciences, the departments of Botany, Chemistry, Geography, Geological Sciences, and Zoological and Biomedical Sciences offer programs for preparation in the study of the environment. These programs allow students to develop a fundamental knowledge of the nature of basic environmental parameters; a sense of the complex interactions of living organisms, including humans, on those parameters; and a basis for approaching solutions to problems resulting from this impact. A student choosing to major in the study of the environment at Ohio University should choose a discipline for intensive investigation (botany, chemistry, geography, geological sciences, microbiology, zoology) and, in consultation with the advisor in that department, develop a program of study to meet the particular goals of that student.

Degree-Granting Programs in the Study of the Environment

The following programs are offered. The requirements for each are listed below.

1. Preparation for Environmental Biology (Botany Emphasis)
2. Preparation for Environmental Biology (Zoology Emphasis)
3. Preparation for Environmental Chemistry
4. Preparation for Environmental Geography
5. Preparation for Environmental Geology

1. Department of Botany

Preparation for Environmental Biology

(Botany-Environmental Biology Major, major code #2113)

The Department of Botany designed this preprofessional program to give students a broad base for developing careers in environmental sciences, conservation, natural resources, forestry, environmental quality control, and ecology. Since graduate degrees may be required for entry into some positions, training beyond the bachelor's degree is strongly recommended.

Students who would like to combine a minor in business administration with this program should see Preparation for Agri-Business listed earlier in this section.

1. Required BOT courses: 110*; 111*; 247; 248; 309; 404; 420; 424; 425 OR 426; 410 OR MICR 211, 212 OR MICR 411
2. Required non-departmental courses
 - a. CHEM 141, 142, 143, 301, 302
 - b. ZOOL 151, 325
 - c. PHYS 201, 202, 203
 - d. MATH 163A
 - e. Either MATH 250B OR PSY 121
 - f. Either CS 220 OR CS 230 OR CS 322

g. GEOL 101 and three courses from the following:
GEOG 101, GEOG 201, GEOG 260 OR GEOG 365,
GEOG 311 OR GEOG 312, GEOG 327, GEOL 211,
GEOL 310, GEOL 330

3. The following are strongly recommended as electives:
BOT 308 OR 312, BOT 310, ECON 101 OR 301, ECON
102 OR 302, ECON 313, MATH 163B, ZOOL 435, ZOOL
477

4. University General Education and Arts and Sciences
bachelor of science degree requirements.

*Under special circumstances, and only with the approval of the Department of Botany undergraduate advising coordinator, BOT 101 and 102 may be considered for substitution for BOT 110 and 111 respectively.

2. Department of Zoological and Biomedical Sciences

Preparation for Environmental Biology

(Zoology-Environmental Biology Major, major code #2509)

This program offered through the Department of Zoological and Biomedical Sciences provides a background for students preparing for graduate school or careers in environmental biology. Selection of courses to fit individual curriculum needs and career goals can be made in the junior-senior program in consultation with the major advisor. It is recommended that the course schedule for the first two years be followed closely.

Freshman

BOT 111 Intro. to Bot.	6
CHEM 141, 142 Fundamentals of Chem.	10
CHEM 143 Quant. Analys.	5
PSY 121 Elem. Stat.	5
ZOOL 150 Intro. to Zool.	6
ZOOL 151 Intro. to Zool.	6
English composition	5
Arts and Sciences college degree requirements, University General Education requirements, and/or electives.	

Sophomore

CHEM 301, 302 Organic	6
MATH 163A, 163B Intro. to Calc.	8
OR	
MATH 263A, 263B Analyt. Geom. & Calc.	10
PHYS 201, 202 Intro. to Phys.	8
ZOOL 325 Genetics	5
ZOOL 375 Animal Ecol.	3
ZOOL 376 Ecol. Lab.	3
Arts and Sciences college degree requirements, University General Education requirements, and/or electives.	

Junior-Senior

ZOOL 460 Animal Physiology	5
ZOOL 477 Population Ecol.	4
ZOOL 479 Evolution	4
English composition	4-5

Plus at least 16 hours from among the following courses or others dealing with the environment in consultation with the advisor:

ZOOL 429 Marine Biol.
ZOOL 430 Invertebrate Zool.
ZOOL 431 Limnology
ZOOL 432 Field Hydrobiology
ZOOL 439 Field Entomology
ZOOL 468 Ichthyology
ZOOL 471 Ornithology
ZOOL 472 Herpetology
ZOOL 473 Animal Behavior
ZOOL 474 Mammalogy

Other Arts and Sciences college requirements and/or electives to be considered:

Social Sciences: BA 465; BUSL 370; ECON 101, 102, 213, 313;
GEOG 140, 141, 142, 201, 242, 311, 312, 327, 422, 429

Humanities: CLNG 127; PHIL 216, 416

Science: BOT 308, 309, 420, 424, 425, 426; CE 450, 451, 452, 455, 456,
458; CHE 460; GEOL 211, 270, 291, 310, 340, 406, 443, 454, 480,
481; INCO 103; IT 336; QBA 420; ME 470; ZOOL 433, 442.

3. Department of Chemistry

Preparation for Environmental Chemistry

(Chemistry-Environmental Major, major code #3315)

Students preparing for careers in environmental chemistry should pursue the regular B.S. or A.B. degree in chemistry and take some of the following environmentally related courses as electives. The Chemistry Department has advisors in environmental chemistry to assist students in planning their studies in the field.

The major requirement for the B.S. degree includes the following: CHEM 141-142-143; 305-306-307; 308-309; 400; 453-454-455; 456-457; 476; 484-485; 489 or 490, 491, 492; and three additional hours (other than 499) above 400. Extradepartmental requirements include ENG 152, MATH 263A-B-C, and PHYS 251-252-253, which should be completed by the end of the second year. The B.S. degree program is chosen by students seeking entrance into graduate programs in chemistry.

The major requirement for the A.B. degree includes the following: CHEM 141-142-143; 301-302 or 305-306-307; 303-304 or 308-309; 325 or 484-485; 351 or 453-454-455; 476; and a course in biochemistry. A full year's work is required in at least one of the following fields: analytical (143-484-485); organic (305-306-307); physical (453-454-455); or biochemistry (490-491-492). ENG 152 is also required.

The following environmentally related electives are suggested courses to choose from: BOT 110 or ZOOL 150; BOT 111, 425, 426; CHEM 330, 479, 483; GEOL 201, 291A, 291E, 291I, 407, 432, 480, 481; ISE 304; MICR 211, 212, 411, 412; ZOOL 151, 475, 476, 477, 479; BUSL 255, 370, 475; ECON 313; GEOG 201, 327, 422; PSY 335; SOC 340.

4. Department of Geography

Preparation for Environmental Geography

(Geography-Environmental Major, major code #4232)

Students preparing for a career in environmental geography should pursue a B.S. degree with a major in geography. Students planning to follow this curriculum should consult the chairman of the Department of Geography as soon as they elect this program so that they can be assigned to advisors.

Students in this program are required to complete a minimum of 192 hours, including geography major requirements, the Arts and Sciences degree requirements in foreign languages and humanities; the University General Education requirements; and the courses listed below:

GEOG 201 Environ. & Man	4
GEOG 301 Adv. Phys. Geog.	4
GEOG 311 Elements of Meteorology	4
GEOG 326 American Conservation Movement	4
GEOG 327 Resource Mgt. & Conservation	4
GEOG 422 Population Geog.	4
Geography electives of interest are:	
GEOG 230 Intro. to Urban Geog.	4
GEOG 380 Remote Sensing	5
GEOG 420 Land Use Planning	4
GEOG 421 Environmental Planning	4
GEOG 435 Evolution of Planning	4
GEOG 477 Quant. Methods	4

Choose at least 18 hours from either the biological sciences or earth sciences group below. The student should take at least eight hours in one subject area and at least two different subject areas. This concurrently will satisfy the Arts and Sciences natural sciences degree requirement.

Biological Sciences:

BOT 101* Prin. of Biol.	5
BOT 102 Plant Biol.	5
BOT 103 Biol., Plants, & Man	4
BOT 110* Intro. to Bot.	6
BOT 111 Intro. to Bot.	6
BOT 247 Veg. N. Amer.	4
BOT 410 Plants & Soil	4
BOT 425 Ecol.	5
BOT 426 Phys. Plant Ecol.	5

MICR 211 Environ. Micro.	3
MICR 212 Environ. Micro. Lab.	2
ZOOL 101* Prin. of Biol.	5
ZOOL 103 Human Biol.	4
ZOOL 150* Intro. to Zool.	6
ZOOL 151 Intro. to Zool.	6
ZOOL 375 Animal Ecol.	3
ZOOL 376 Ecol. Lab.	2
ZOOL 477 Population Zool.	4
ZOOL 478 Population Zool. Lab.	3

*Note that credit is awarded only for one of the following courses: BOT 101, BOT 110, ZOOL 101, ZOOL 150. Note also that credit is not awarded for both BOT 102 and BOT 111.

Earth Sciences:

GEOL 101 Earth Materials & Struct.	4
GEOL 102 Surface Proc. & Environ. Geol.	4
GEOL 201 Man & Phys. Environ.	4
GEOL 211 Intro. Oceanography	3
GEOL 270 World Mineral Resources	3
GEOL 291 Selected Topics in Geol.	2
GEOL 330 Prin. of Geomorphology	5
GEOL 431 Regional Geomorphology of N. Amer.	4
GEOL 432 Origin & Classification of Soils	4
GEOL 480 Hydrology I	4
GEOL 481 Hydrology II	4

To complete the natural sciences requirement, add at least one nongeology natural sciences course.

Choose at least 18 hours from the list below. This includes at least eight hours in one subject area and at least two different subject areas. This concurrently will satisfy the Arts and Sciences social sciences requirement.

BUSL 255 Law & Society	4
BUSL 370 Envir. Law	4
ECON 101 Prin.	4
ECON 102 Prin.	4
ECON 303 Microeconomics	4
ECON 304 Macroeconomics	4
ECON 313 Econ. of the Envir.	4
HIST 333 Oil, Energy, Interna. Diplomacy	4
PSY 335 Envir. Psych.	4
SOC 340 Population Analys.	4
Complete the University General Education requirements.	

5. Department of Geological Sciences

Preparation for Environmental Geology

(Geological Sciences-Environmental Major, major code #3323)

The preprofessional program in environmental geology, offered by the Department of Geological Sciences, is designed to provide the student with broad training in preparation for a career in conservation, natural resource management, land-use planning, and environmental quality control. In most instances, students electing this degree option should anticipate further training at the graduate level. It is of utmost importance that students enrolling in this program consult the undergraduate advisor in the Department of Geological Sciences before planning their schedule of coursework. The program permits development of individualized curriculum needs during the junior and senior years. However, the outlined course schedule should be followed closely during the first two years of study.

Freshman

GEOL 101 Intro. to Geol.	5
OR	
GEOL 253 Geol. for Engineers	5
GEOL 256 Hist. Geol.	4
GEOL 330 Prin. of Geomorphology	5
GEOG 201 Envir & Man	4
BOT 110 or ZOOL 150	6
CHEM 141 Fundamentals of Chem.	5
CHEM 142 Fundamentals of Chem.	5
CHEM 143 Quant. Analys.	5
ENG 151 Fr. Comp. Wrtng. & Rhet.	5

Sophomore

GEOL 211 Intro. Oceanography	3
GEOL 310 Rocks & Minerals	5
GEOL 350 Strat.-Sediment	4
GEOG 230 Intro. to Urban Geog.	4
MATH 163A, 163B Intro. to Calc.	8
OR	
MATH 263A, 263B Analyt. Geom. & Calc.	10
PHYS 201 Intro. to Phys.	4
PHYS 202 Intro. to Phys.	4

Junior-Senior

GEOL 305 Air-Photo Map Interp.	2
GEOL 360 Struct. Geol.	4
GEOL 407 Geol. Appl. in Remote Sensing	4
GEOL 432 Origin & Classification of Soils	4
GEOL 480 Hydrogeology I	4
GEOG 327 Geog. Perspective on Resource Mgt. & Conservation	4
English composition	4-5

In addition to the program requirements outlined above, the student should select additional coursework from either of the following groups and complete the Arts and Sciences degree requirements and the University General Education requirements:

BOT 425 Ecol.	5
BOT 426 Physiol. Plant Ecol.	5
CHEM 301 Organic Chem.	3
CHEM 302 Organic Chem.	3
CHEM 325 Instr. Methods of Analys.	4
CHEM 330 Toxicology	4
CHEM 479 Radiochem.	4
ZOOL 151 Intro. to Zool.	6
ZOOL 375 Animal Ecol.	3
ZOOL 477 Pop. Biol.	4

Other electives recommended for consideration by the student include: BA 465; BUSL 370; CHEM 460; CE 450, 451, 452, 455, 456, 458; CS 220; ECON 101, 102, 213; GEOG 311, 312, 422, 429; INCO 103; ISE 305; QBA 420; ME 470.

Preparation for Field Biology

(Botany-Field Biology Major, major code #2115)

The program in field biology offered through the Department of Botany is designed to prepare students for employment as park naturalists and in outdoor education, outdoor education programs, and conservation. The program is not designed to prepare students for advanced training in more specialized fields. It should be emphasized that students who enter this program, if they later decide to pursue advanced training in biology, will have to acquire additional background in physics, math, and chemistry. Students anticipating entering graduate school in biologically oriented disciplines should elect one of the preprofessional programs in botany or the traditional B.S. botany major. Students wishing to include a minor in business administration with this program should consult with an advisor in the Department of Botany for details.

1. Required BOT courses: I10*, 111*, 247, 248, 309, 310, 404, 420, and 425
2. Additional courses in BOT are to be selected from the following list to make a minimum of 50 total hours in BOT: 307, 308, 311, 312, 313C, 331, 405, 410, 412, 426, 427, 431, 460, and 475
3. Required non-departmental courses
 - a. ZOOL 151 plus a minimum of 20 hours from the following—ZOOL 271**, 325**, 375**, 376, 429, 430, 432, 433, 434, 435**, 439**, 457, 468, 471, 472, 474, 477, 478, MICR 211 and 212 OR MICR 411
 - b. CHEM 121, 122, 123 OR CHEM 141, 142, 143
 - c. GEOL 101 plus a minimum of 4 additional hours from GEOL
 - d. GEOG 101 plus a minimum of 8 additional hours from GEOG

- e. It is recommended that PSY 121 be used to fulfill the Tier I quantitative skills requirement
- f. University General Education and Arts and Sciences bachelor of science degree requirements.

*Under special circumstances and only with the approval of the Department of Botany undergraduate advising coordinator, BOT 101 and 102 may be considered for substitution for BOT 110 and 111 respectively.

**Strongly recommended.

Preparation for Forestry

(Botany-Preforestry Major, major code #2112)

Although no professional forestry program is offered at Ohio University, the Department of Botany does have cooperative arrangements with schools of forestry, forestry resources, or natural resources at other universities whereby students can obtain some preprofessional training at Ohio University and then transfer to one of the cooperating universities to complete their professional programs in forestry or related disciplines. Cooperative programs are currently in effect with the University of Michigan at Ann Arbor, North Carolina State University at Raleigh, and Duke University. Students interested in these cooperative programs should discuss them with the Department of Botany undergraduate advisor.

Freshman

BOT 110, 111 Intro. to Bot.	12
ZOOL 151 Intro. to Zool.	6
CHEM OR MATH (see advisor before selecting)	12-15
Language or Tier II requirements	12

Sophomore and above

To be arranged with the Department of Botany undergraduate advisor.

Gerontology Certificate Program

The colleges of Arts and Sciences and Health and Human Services jointly sponsor the undergraduate Gerontology Certificate Program for students in any major program within the University who want to gain knowledge and skills for a career in working with the elderly. Completion of this program is officially recognized on the student's transcript upon graduation.

See the *Courses of Instruction* section of this catalog for the Gerontology Certificate Program requirements.

Preparation for Government Foreign Service

(Economics-Preforeign Service Major, major code #4223)

(History-Preforeign Service Major, major code #4212)

(Political Science-Preforeign Service Major, major code #4202)

Students desiring to prepare for the foreign service officer examinations, which are given yearly, are advised to acquire as broad an education as possible. Facility in written and spoken English; competency in a foreign language; and a good background in economics, history, political science, business, or public administration are essential. Detailed information about foreign service officer examinations, including sample questions from previous examinations, may be obtained from the major departments.

Preparation for Law

(Economics-Prelaw Major, major code #4222)

(History-Prelaw Major, major code #4214)

(Philosophy-Prelaw Major, major code #5244)

(Political Science-Prelaw Major, major code #4203)

(Sociology-Prelaw Major, major code #4254)

A student in the College of Arts and Sciences, who plans to enter law school, normally completes the specific requirements for the bachelor of arts degree. No special curriculum is prescribed. The prelaw student may complete a major in the area of his or her principal interest. The student is advised to select courses from as many of the following as possible: English composition and literature and American literature; history, with a preference for English and American; political science; economics; sociology; a laboratory science; mathematics; philosophy; ethics; logic; accounting; psychology; and a foreign language. Courses in speech and training in expression, as well as activities that develop the capacity for independent thought and action, are recommended. The departments of Economics, History, Philosophy, Political Science, and Sociology and Anthropology designate faculty advisors to help students interested in law careers. These advisors have information about the Law School Admissions Test and can supply application blanks for this test.

The Ohio Supreme Court has ruled that a student entering law school must be able to show possession of an undergraduate degree from an approved college if he or she wishes to take the Ohio Bar Examination. Law schools in the state of Ohio require the degree of all entering students regardless of the state in which they plan to take the bar examination.

The degree *in absentia* privilege is available to students who do not plan to seek admission to an Ohio law school. A student who has completed 144 quarter hours at Ohio University with a point-hour ratio of 2.0 or above on all hours attempted and who has satisfied the requirements for the A.B. or B.S. degree may obtain the degree after completing, at an accredited school of law, a full year's work of the quality prescribed for a bachelor's degree at Ohio University, provided he or she is eligible for advancement without condition to the second year of law school. Prior to entering the school of law, the student must secure a statement in writing from the dean giving the *in absentia* privilege.

Preparation in Linguistics

The undergraduate student with an interest in linguistics should take one of the minors offered in the Department of Linguistics. There are three minors to choose from: general linguistics, sociolinguistics, and English as a second language. Moreover, it is possible to apply for admission into the Bachelor of General Studies Program (see entry in the *University College* section of this catalog). If accepted, the student may work toward the B.G.S. degree following a program planned to give the strongest preparation for graduate study in linguistics that the resources of the University allow, or, the student may work within one of the departments permitting programs that are linguistically oriented. See, for example, the programs in English, modern languages, and hearing and speech sciences. Depending upon the kind of linguistics the student wishes to study, he or she may want to consider an undergraduate major in mathematics, psychology, or philosophy. Students interested in anthropological linguistics may want to consider the various course offerings in anthropology and those associated with the Center for International Studies programs: courses in African languages and particular aspects of African culture, or courses in Southeast Asian languages and cultures. (See the entry *Center for International Studies* in this catalog.)

Inquiries concerning the linguistics minors or on planning undergraduate programs with emphasis upon linguistics may be directed to the chairman of the Department of Linguistics, College of Arts and Sciences.

Preparation for Marine or Freshwater Biology

(Zoology/Marine or Freshwater Biology Major, major code #2514)

The Program in Ecology, Behavior, and Evolution, in the Department of Zoological and Biomedical Sciences, provides a program for undergraduate majors in zoology who are interested in marine and freshwater biology. Graduates from this program will meet state and federal civil service course qualifications for registers for fishery biologist, ecologist, and general biologist. This program will also provide undergraduate training for students planning to go to graduate school in either marine or freshwater biology.

Freshman

BOT 111 Intro. to Biol.	6
CHEM 141, 142, 143 Fund. of Chem.	10
PSY 121 Elem. Stat.	5
ZOOL 150, 151 Intro. to Zool.	12
English composition	5
Arts and Sciences degree requirements, University General Education requirements, and/or electives.	

Sophomore

CHEM 301, 302 Organic Chem.	6
HSC 126 Scuba	1
MATH 163A, 163B Intro. to Calc.	8
PHYS 201, 202 Intro. to Phys.	8
ZOOL 325 Genetics	5
ZOOL 376 Ecology Lab.	3
Arts and Sciences degree requirements, University General Education requirements, and/or electives.	

Junior-Senior

(1) Each of the courses from the following core:

ZOOL 429 Marine Biol.**	5
OR	
ZOOL 431, 432 Limnology, Field Hydrobiol.*	4,3
AND	
ZOOL 430 Invert. Zool.	6
ZOOL 460 Animal Physiol.	5
ZOOL 468 Ichthyology	4
ZOOL 477 Population Ecol.	4
ZOOL 479 Evolution	4
English composition	4-5

(2) Plus at least two courses from the following biology electives:

BOT 310 Bid. of Fungi	5
BOT 420 Freshwater Algae*	5
MICR 411 Gen. Micro.	6
ZOOL 271, 471 Ornithology**	2,3
ZOOL 429 Marine Biol.**	5
ZOOL 431, 432* Limnology, Field Hydrobiol.	4,3
ZOOL 439 Field Entomology*	5
ZOOL 457 Animal Systematics	4
ZOOL 461 Animal Physiology Lab.	4
ZOOL 473 Animal Behavior	5

(3) Plus at least two courses from the following electives outside biology:

BUSL 370 Environ. Law	4
CE 452 Water & Wastewater Analys.*	3
CE 458 Water Qual. Engr.*	3
CHEM 325 Instr. Meth. Analys.	4
GEOG 311 Meteorology	5
GEO 211 Intro. to Oceanography**	4
GEO 454 Marine Geol.**	4
GEO 450 Hydrogeology*	4

*Courses for students with an emphasis in freshwater biology.

**Courses for students with an emphasis in marine biology.

Preparation for Medical Technology

(Zoology Medical Technology Major, major code #2123)

This program in medical technology prepares students

for work in hospital laboratories, public health bureaus, and other laboratories concerned with medical diagnosis and investigation. It leads to a bachelor of science degree in zoology and certification by the American Society of Clinical Pathologists or other certifying body.

The Ohio University-hospital school of medical technology affiliation for training of medical technologists fulfills the requirements established by the A.M.A. and A.S.C.P. and affords the student an opportunity to earn the bachelor's degree.

After completing (1) a minimum of 144 quarter hours with at least a 2.0 point-hour ratio in the major and in all hours attempted and (2) all area requirements for the baccalaureate degree, the student is eligible to apply for admission to one of several affiliated hospital schools for the clinical program. Upon satisfactory completion of the 12-month clinical program, the student will receive the bachelor of science degree from Ohio University.

Approval occasionally may be granted for completion of the clinical program at hospitals other than those affiliated with Ohio University if such hospitals have C.A.H.E.A.-approved programs in medical technology and if, for reasons of location or other factors, this would better meet the needs of the student. A student seeking such approval is required to present a copy of the hospital's program of study to the Department of Zoological and Biomedical Sciences for evaluation. The student may enroll in this substitute program if it is approved.

The student is urged to consult his or her advisor frequently during the preclinical period. Early in the fall quarter preceding the clinical program, specific information about applying to an affiliated school of medical technology should be obtained from the medical technology advisor.

During the 12-month clinical program the student registers with and pays fees to Ohio University. A special fee schedule applies to these four quarters and both fourth- and fifth-year students are required to register. Ohio University then pays the total tuition for each student to the hospital-based school of medical technology.

A student who transfers from another program or institution (including branch campuses of Ohio University) cannot normally expect to complete the preclinical requirements in three years unless the need to make up courses is minimal.

A student requiring financial assistance may apply for a Kellogg Foundation or other loan through the Office of Student Financial Aids and Scholarships.

Freshman

CHEM 141 Fundamentals of Chem.	5
CHEM 142 Fundamentals of Chem.	5
CHEM 143 Quant. Analys.	5
English composition	5
MATH 113 Algebra	5
OR	
MATH 163A Intro. to Calc.**	5
ZOOL 150 Intro. to Zool.	6
ZOOL 151 Intro. to Zool.	6
Arts and Sciences degree requirements, University General Education requirements, and/or electives.	

**Of the choices, this is recommended.

Sophomore

CHEM 301, 302 Organic (short)	6
CHEM 325 Instr. Methods of Analys.	4
ZOOL 300 Elements of Anat. & Histology	6
ZOOL 325 Gen. Genetics	5
ZOOL 345 Human Physiology	4
Arts and Sciences degree requirements, University General Education requirements, and/or electives.	

Junior

MICR 411 Gen. Micro.	6
MICR 415 Immunology	6

ZOOL 463 Cell Chem.	4
ZOOL 464 Physiol. Chem. Lab.	4
English composition	4-5
Arts and Sciences degree requirements, University General Education requirements, and/or electives.	

Plus at least 15 hours from among the following courses:

CHEM 303 Organic Chem. Lab.	2
CHEM 304 Organic Chem. Lab.	3
CS 120 Comput. Science Survey	5
HRM 420 Admin. of Personnel	4
IT 336 Bioelectronics	3
MICR 412 Micro. Techn.	4
MICR 413 Pathogenic Bacteriology	6
MICR 414A Virology	3
MICR 414B Virology Lab.	1
PHYS 201, 202, 203 Intro. to Phys.	4-4-4
PSY 121 Elem. Stat. for Behavioral Sciences	5
ZOOL 305 Histological Techn.	3
ZOOL 326 Lab. Genetics	4
ZOOL 346 Human Physiology Lab.	2
ZOOL 441 Parasitology	6

Four quarters of coursework constituting the clinical portion of the program are taken at a hospital-based school of medical technology. The student registers each quarter for these courses which are entitled Medical Technology Clinical Internship 470A, B, C, and D. A typical program includes:

Bacteriology and serology	18 hours
Clinical chemistry	23 hours
Hematology	10 hours
Immunohematology	5 hours
Parasitology	3 hours
Radioisotopes	1 hour
Urinalysis	4 hours

Preparation for Medicine

Most medical colleges require completion of the bachelor's degree for admission; all others require a minimum of three academic years.

No specific area for the major is required by medical colleges or by Ohio University in undergraduate preparation for medicine. The student must present preparation in various basic sciences, and many students do complete a major in one science or a dual major in two sciences.

For most medical schools, the requirements for admission include general chemistry; quantitative analysis; organic chemistry, including laboratory; mathematics; physics; general zoology; comparative vertebrate anatomy; and embryology. Many medical schools now require or strongly recommend at least a year of behavioral and social sciences, a year of English, and additional courses in humanities. (Refer to courses recommended to fulfill these requirements following the Zoology Major Program, code #2502.) If the student has a particular medical school in which he or she wishes to enroll, the program should be planned to meet the specific requirements of that school.

All medical college applicants are required to take the Medical College Admission Test (MCAT) in spring (preferred) or fall of the calendar year previous to the year they expect to enroll in medical college.

A student who plans to complete only three years at Ohio University before entering medical college is urged to meet requirements of the College of Arts and Sciences so as to be eligible for the degree *in absentia* privilege.

Chemistry-Premedicine Major

(major code #3314)

One possible program for premedical students majoring in chemistry is listed below, a program leading to an A.B. degree. A more substantial B.S. program, one based on the B.S. chemistry major, is an alternative which should be considered by the well-motivated student. Details of the

B.S. major program may be found in the last section of this bulletin, preceding the listing of chemistry department courses. A B.S. chemistry-premedicine major would include elective credits in zoology in addition to the B.S. major requirements noted.

Freshman

CHEM 141 Fundamentals of Chem.	5
CHEM 142 Fundamentals of Chem.	5
CHEM 143 Quant. Analys.	5
ENG 151 Fr. Comp.: Wrting. & Rhet.	5
MATH 263A, 263B, 263C Analyt. Geom. & Calc.	15
ZOOL 150 Intro. to Zool.	6
ZOOL 151 Intro. to Zool.	6
Arts and Sciences degree requirements (including language), University General Education requirements, and/or electives.	

Sophomore

CHEM 301, 302** Organic Chem.	6
OR	
CHEM 305, 306, 307 Organic Chem.	9
CHEM 303, 304** Organic Chem. Lab.	5
OR	
CHEM 308, 309 Organic Chem. Lab.	6
PHYS 251, 252, 253 Gen. Phys.	15
Arts and Sciences degree requirements (including language), University General Education requirements, and/or electives.	

Junior

CHEM 351** Phys. Chem.	4
OR	
CHEM 453, 454, 455 Phys. Chem.	9
CHEM 325** Instr. Methods of Analys.	4
OR	
CHEM 484* Electrochem. Methods of Analys.	5
AND	
CHEM 485* Spectrochem. Analys.	5
ENG 305J Tech. Wrting.	4
ZOOL 303 Compar. Vertebrate Anat.	6
ZOOL 325* Gen. Genetics	5
Arts and Sciences degree requirements (including language), University General Education requirements, and/or electives.	

Senior

CHEM 476† Mod. Inorganic Chem.	4
CHEM 490**†, 491**†, 492**† Intro. to Biochem.	9
OR	
CHEM 489 Basic Biochem.	4
ZOOL 406* Vertebrate Embryology	6
Arts and Sciences degree requirements (including language), University General Education requirements, and/or electives.	

*Desirable but not required.

**Students who select these courses are reminded that a full year's work in one of these fields is required.

†Students anticipating the degree *in absentia* privilege should schedule these requirements in the junior year.

Zoology-Premedicine Major

(major code #2502)

Premedical students majoring in zoology will be required to complete the following program. Students who elect the degree *in absentia* option must complete a minimum of 36 hours in zoology/microbiology; those who elect the four-year program must complete a minimum of 45 hours in zoology/microbiology.

Freshman

CHEM 141 Fundamentals of Chem.	5
CHEM 142 Fundamentals of Chem.	5
CHEM 143 Quant. Analys.	5
MATH 163A, 163B Intro. to Calc.	8
OR	
MATH 263A, 263B Analyt. Geom. & Calc.	10
ZOOL 150, 151 Intro. to Zool.	12
English composition	5
Arts and Sciences degree requirements, University General Education requirements, and/or electives. (English and comparative arts are recommended.)	

Sophomore

CHEM 301, 302 Organic (short)	6
OR	
CHEM 305, 306, 307 Organic (long)	9
PHYS 201, 202, 203 Intro.	12
ZOOL 303 Compar. Vert. Anat.	6
ZOOL 325 Gen. Genetics	5
Language if needed	12
Recommended: PSY 121 or Math 250B	
Arts and Sciences degree requirements, University General Education requirements, and/or electives in humanities and social sciences.	

Junior

CHEM 303, 304 Organic Lab (short)	5
OR	
CHEM 308, 309 Organic Lab (long)	6
ZOOL 448* Cell Physiology (recommended, not required)	4
English composition	5
Language if needed	12
Other humanities and social sciences	

Junior-Senior

CHEM 325 Instr. Analys.	4
ZOOL 404 Compar. Vert. Anat.	6
ZOOL 406 Embryology	6
ZOOL 460* Animal Physiology	4
ZOOL 463 Cell Chem.	4
OR	
CHEM 489 Basic Biochem.	4
OR	
CHEM 490, 491 Intro. Biochem.	6

*Either ZOOL 460 or 448 is required.

Recommended electives: MICR 411, IT 336, ZOOL 326, 461.

Recommended behavioral and social sciences: ANTH 101 or 370, 355; sociology and computer science courses; PSY 231, 273, 332, 336.

Recommended humanities: CLNG 127, philosophy, literature, comparative arts.

Two-Year Program in Mental Health Technology

The College of Arts and Sciences through the Department of Social Work offers the associate in applied science degree in mental health technology. The MHT program is fully approved by the Council for Standards in Human Service Education.

The program prepares students for employment in the range of social service agencies, including institutions for the mentally ill and mentally retarded, community mental health clinics, residential child-care facilities, drug and alcohol abuse programs, nursing homes, and other agencies providing human service.

Because all credits earned in the program can apply to a four-year degree, students may choose to pursue the associate and bachelor's degrees simultaneously. If so, early consultation with the MHT program director is advised.

Students seeking admission to the program must obtain application forms from the MHT program director and schedule interviews.

A minimum of 100 hours is required (with a 2.0 average at graduation) to be completed in no fewer than six quarters.

Freshman

MHT 101 Intro. to Mental Health	4
PSY 101 Gen. Psych.	5
ZOOL 103 Human Biol.	5
Humanities elective	4
MHT 205 Helping Relationship	4
PSY 323 Psych. of Personality	4
SOC 101 Intro. to Soc.	5
Humanities elective*	4

MHT 210 Social Casework	4
PSY 273 Child & Adolescent Psych.	4
PSY 332 Abnormal Psych.	4

Sophomore

EDUC 410 Human Relations	3
MHT 215 Activity Therapies	4
MHT 221 Practi. in Mental Health I	10

EDUC 440 Foundations in Group Dynamics	4
MHT 222 Practi. in Mental Health II	10
SW 290 Am. Social Welfare Institutions	4

MHT 223 Practi. in Mental Health III	10
MHT 231 Seminar in Mental Health	4
SW 391 Social Security System	4

*To include University English composition requirement.

Preparation for Meteorology

(Geography-Meteorology Major, major code #4233)

(Mathematics-Meteorology Major, major code #3104)

(Physics-Meteorology Major, major code #3336)

The following program is intended to provide an interdisciplinary program in the departments of Geography, Mathematics, and Physics for students who wish to prepare themselves for training at the graduate level in the fields of meteorology, climatology, and atmospheric physics. The choice of a geography, mathematics, or physics emphasis is open to the student.

Freshman

CHEM 141 Fundamentals of Chem.	5
CHEM 142 Fundamentals of Chem.	5
GEOG 101 Elements of Physical Geog.	5
GEOL 101 Intro. to Geol.	5
MATH 263A, 263B, 263C Analyt. Geom. & Calc.	15
English composition	5

Sophomore

GEOG 201 Environment and Man	4
GEOL 211 Oceanography	5
MATH 340 Diff. Equations	5
MATH 440 Vector Analysis	5
MATH 441 Fourier Series & Partial Diff. Equations	5
PHYS 251, 252, 253 Gen. Phys.	15
OR	
PHYS 201, 202, 203, Intro. to Phys.	12
AND	
PHYS 315 Intermed. Phys. for Scientists & Engineers	4

Junior

GEOG 311 Meteorology	5
GEOG 312 Climatology	5
PHYS 311, 312 Mechanics	8
English composition	4-5

Senior

Two courses in computer programming or quantitative methods (see advisor for approved list)	10
GEOG 314 Practi. in Meteorological Forecasting	2-10
PHYS 411 Thermodynamics	4

In addition, the student should select one of the three departments for specialization, contact that department for advising, and select the appropriate additional set of courses given below:

Plan A (Emphasis in Geography)

GEOG 121 Intro. to Cultural Geog.	4
GEOG 301 Adv. Physical Geog.	4
GEOG 327 Resource Mgt.	4
GEOG 260 or 360 or 365	4 or 5

Plan B (Emphasis in Mathematics)

MATH 360 Intermed. Analys.	5
MATH 444 Intro. to Numerical Analys.	5

Plan C (Emphasis in Physics)

CE 340 Fluid Mechanics	5
PHYS 272, 273 Electronic Lab.	4

PHYS 316 Mod. Phys.	3
PHYS 412 Kinetic Theory & Statistical Mechanics	4
OR	
PHYS 423 Optics	4

The student must also take courses necessary to satisfy the requirements of the College of Arts and Sciences, and electives as necessary to fulfill the University hours and General Education requirements.

Preparation for Optometry

(Zoology-Preoptometry Major, major code #2505)

The requirements for admission to schools of optometry are not uniform. A minimum of 90 hours exclusive of military science and physical education is required. The following curriculum will meet the admission requirements for a collegiate program and consequently of most independent schools of optometry. The student planning to earn the degree *in absentia* must complete at least 144 hours including all Arts and Sciences degree requirements and the program outlined below.

Freshman

CHEM 141 Fundamentals of Chem.	5
CHEM 142 Fundamentals of Chem.	5
CHEM 143 Quant. Analys.	5
MATH 263A Analyt. Geom. & Calc.	5
MATH 263B Analyt. Geom. & Calc.*	5
ZOOL 150 Intro. to Zool.	6
ZOOL 151 Intro. to Zool.	6
English composition	5
Arts and Sciences degree requirements, University General Education requirements, and/or electives.	

*Suggested, not required.

Sophomore

CHEM 301, 302 Organic (short)	6
CHEM 303, 304 Organic Lab.	5
PSY 101 Gen. Psych.	5
ZOOL 303 Compar. Vertebrate Anat.	6
ZOOL 325 Gen. Genetics	5
Arts and Sciences degree requirements, University General Education requirements, and/or electives.	

Junior

PHYS 201, 202, 203 Intro.	12
ZOOL 345 Human Physiology	4
OR	
ZOOL 460 Animal Physiology	5
English composition	4-5
Arts and Sciences degree requirements, University General Education requirements, and/or electives.	
Plus at least 10 hours from among the following courses:	
MICR 411 Gen.	6
ZOOL 404 Compar. Vert. Anat. (Mammalian)	6
ZOOL 406 Vert. Embryology	6
ZOOL 408 Histology	6
ZOOL 448 Cell Physiology	4
ZOOL 463 Cell Chem.	4

The student should consult the departmental advisor and the dean of the college regarding the program for the fourth year.

Further information relative to requirements and the profession of optometry may be obtained by writing to the American Optometric Association, Department of Public Information, 700 Chippewa Street, St. Louis, Missouri 63319.

Preparation for Pharmacy

(Zoology-Prepharmacy Major, major code #2506)
(Chemistry-Prepharmacy Major, major code #3313)

Most schools of pharmacy require 90 quarter hours of academic credit, exclusive of physical education and military science, for admission. The following general program will meet the requirements of most schools. There is no *in absentia* arrangement for pharmacy.

Freshman

CHEM 141 Fundamentals of Chem.	5
CHEM 142 Fundamentals of Chem.	5
CHEM 143 Quant. Analys.	5
MATH 163A, 163B Intro. to Calc.	8
OR	
MATH 263A, 263B Analyt. Geom. & Calc.	5-5
ZOOL 150, 151 Intro. to Zool.	12
English composition	5
Arts and Sciences degree requirements, University General Education requirements, and/or electives.	

Sophomore

CHEM 305, 306, 307 Organic (long)	9
CHEM 308, 309 Organic Lab.	6
ECON 101 Prin.	4
MATH 250B Finite Math.	5
PHYS 201, 202, 203 Intro.	12
QBA 201 Intro. to Prob. and Stat.	4
ZOOL 300 Elements of Anat.	6
Arts and Sciences degree requirements, University General Education requirements, and/or electives.	

The student may complete this program plus the additional requirements for the A.B. or B.S. degree with a major in zoology or chemistry.

Since some pharmacy schools require additional courses not listed here, a student wishing to go to a specific school should write to the school of his or her choice for additional requirements as soon as possible.

Preparation for Physical Therapy

To enter the physical therapy profession, the student must complete baccalaureate-level preprofessional preparatory coursework and then gain admission, on a competitive basis, to a professional school of physical therapy. The student must complete the requirements for that program and pass the qualifying examination of the American Physical Therapy Association.

Ohio University offers a unique opportunity to the prospective physical therapist. Recognized as a leader in the development of preprofessional physical therapy curricula since the 1930s the Department of Zoological and Biomedical Sciences works cooperatively with the School of Physical Therapy in Ohio University's College of Health and Human Services. The department also has formal affiliation arrangements with The Mayo Clinic and Northwestern University Schools of Physical Therapy for placement of its prephysical therapy students into the professional program. In addition, the optional plans described below can prepare the student to be highly qualified for admission to most other schools of physical therapy.

Students are encouraged to note particularly the opportunities provided by the School of Physical Therapy at Ohio University. Those who complete the prephysical therapy program and then complete the professional program at Ohio University will be eligible to receive both the bachelor of science degree with a major in zoology-prephysical therapy from the College of Arts and Sciences and the bachelor of science in physical therapy degree from the College of Health and Human Services.

The following programs extending over a period of two, three, or four years at Ohio University are recommended to students who wish to enter physical therapy. **NOTE:** Those prephysical therapy students who plan to apply for admission to the physical therapy program at Cleveland State University are required to take two of the following five courses at Ohio University: genetics, vertebrate embryology, microbiology, histology, cell physiology.

Some professional schools of physical therapy require that each applicant take the Allied Health Admissions Test in the fall or winter of the calendar year prior to the

year of expected admission to a physical therapy program. Each student will be responsible for determining whether this is a requirement of the selected school(s).

Plan A: After completing (1) a minimum of 144 quarter hours including the entire Plan A curriculum with at least a 2.0 point-hour ratio in the major and in all hours attempted and (2) all area requirements for the baccalaureate degree, the student may apply for admission to an accredited school of physical therapy. Upon satisfactory completion of 12 months of professional training in physical therapy the student will receive the bachelor of science degree *in absentia* from Ohio University with a major in zoology. At present Ohio University is affiliated with the Ohio University School of Physical Therapy in the College of Health and Human Services, The Mayo Clinic, and Northwestern University in this degree *in absentia* program.

Plan B: The student may elect to transfer to an accredited school of physical therapy and not complete the degree requirements at Ohio University. If this option is elected it is suggested that the transfer be made no later than the end of the sophomore year, and the student's academic program while at Ohio University should essentially follow that of Plan A. Care should be taken to fulfill all special admission requirements established by the school to which the student is transferring.

Those students planning to apply to the physical therapy program at Cleveland State University are required to take, in addition to the courses listed in Plan B, two of the following five courses and to earn at least a C average, or better, before they will be eligible for admission to the Cleveland State University program:

ZOOL 448 (cell physiology); ZOOL 325 (genetics); ZOOL 408 (histology); ZOOL 406 (vertebrate embryology); and MICR 411 (microbiology).

Plans C and D: A student may elect to pursue a career in physical therapy after completing a four-year bachelor's degree program at Ohio University majoring in either zoology (Plan C) or psychology (Plan D). It is recommended that such students follow one of the baccalaureate programs below and apply for entrance to a certificate program in an accredited school of physical therapy to commence after graduation from Ohio University.

Plans A or B: Three-year degree *in absentia* and transfer program.

(Zoology-Prephysical Therapy Major, major code #2507).

The following courses are required:

Freshman

CHEM 121, 122, 123 Prin. of Chem.	12
ENG 151 Fr. Comp.: Wrng. & Rhet.	5
MATH 113 Algebra	5

OR

MATH 163A Intro. to Calc.	5
PSY 101 Gen. Psych.	5
PSY 121 Elem. Stat. for the Behavioral Sciences	5
ZOOL 150, 151 Intro. to Zool.	12
Arts and Sciences degree requirements, University General Education requirements, and/or electives.	

Sophomore

HLTH 202 Personal & Community Health	4
HS 269A Intro. Phys. Therapy	2
PHYS 201, 202 Intro.	8
PSY 273 Child & Adolescent	4
SOC 101 or 302 Prin.	5
ZOOL 301 Human Anat.	6
ZOOL 345 Human Physiology	4
ZOOL 346 Human Physiology Lab.	2
ZOOL 352 Kinesiology	4
Arts and Sciences degree requirements, University General Education requirements, and/or electives.	

Junior

HSAT 329 Intro. to Athletic Training	2
ZOOL 445 Physiology of Exercise	4
ZOOL 446 Physiology of Exercise Lab.	2
English composition	4-5
Zoology elective	3
Arts and Sciences degree requirements, University General Education requirements, and/or electives. Students who elect the degree <i>in absentia</i> option (Plan A) must complete a minimum of 36 hours in zoological and biomedical sciences.	

Senior

To be completed at an accredited school of physical therapy. The following courses are suggested to be used to supplement the major or serve as electives:

CLNG 127 Greek & Latin Words in Engl.	3
HSAT 420A, 420B Adv. Athletic Training I, II	4,4
HSS 108 Intro. to Speech Disorders	3
OR	
HSS 336 Speech & Hearing Disorders in	
Pub. School	3-4
HSS 424 Neuropathologies of Speech & Lang.	3-4
PSY 231 Psych. of Adjustment	4
PSY 275 Educ.	4
PSY 332 Abnormal	4
ZOOL 303 Compar. Vertebrate Anat.	6
ZOOL 325 Gen. Genetics	5
ZOOL 406 Vert. Embryology	6
ZOOL 460 Animal Physiology	5
ZOOL 479 Evolution	4

Plan C: Four-year degree and transfer program.
(Zoology-Prephysical Therapy Major, major code #2507).

The following courses are required:

Freshman

CHEM 121, 122, 123 Prin. of Chem.	12
ENG 151 Fr. Comp.: Wrng. & Rhet.	5
MATH 113 Algebra	5

OR

MATH 163A Intro. to Calc.	5
PSY 101 Gen. Psych.	5
PSY 121 Elem. Stat. for the Behavioral Sciences	5
ZOOL 150, 151 Intro. to Zool.	12
Arts and Sciences degree requirements, University General Education requirements, and/or electives.	

Sophomore

HLTH 202 Personal & Community Health	4
PHYS 201, 202 Intro.	8
SOC 101 or 302 Prin.	5
ZOOL 301 Human Anat.	6
ZOOL 345 Human Physiology	4
ZOOL 346 Human Physiology Lab.	2
ZOOL 352 Kinesiology	4
Arts and Sciences degree requirements, University General Education requirements, and/or electives.	

Junior

HSAT 329 Intro. to Athletic Training	2
PSY 273 Child & Adolescent	4
ZOOL 303 Compar. Vertebrate Anat.	6
ZOOL 325 Gen. Genetics	5
English composition	4-5
Arts and Sciences degree requirements, University General Education requirements, and/or electives.	

Senior

ZOOL 445 Physiology of Exercise	4
ZOOL 446 Physiology of Exercise Lab.	2
Students who complete the four-year program must complete a minimum of 45 hours in zoological and biomedical sciences.	
Arts and Sciences degree requirements, University General Education requirements, and/or electives.	

The following are suggested courses to be used to supplement the major or serve as electives:

CLNG 127 Greek & Latin Words in Engl.	3
HSAT 420 Adv. Athletic Training	4

HSS 108 Intro. to Speech Disorders	3
OR	
HSS 336 Speech & Hearing Disorders in Pub. Schools	3-4
HSS 424 Neuropathologies of Speech & Lang.	3-4
PSY 231 Psych. of Adjustment	4
PSY 275 Educ.	4
PSY 332 Abnormal	4
ZOOL 404 Compar. Vertebrate Anat.	6
ZOOL 460 Animal Physiology	5
ZOOL 479 Evolution	4

Plan D: Four-year A.B. in psychology program.

(Psychology-Prephysical Therapy Major, major code #4105)

The following courses are required:

Freshman

CHEM 121, 122, 123 Prin. of Chem.	12
Freshman Level Eng.	4-5
MATH 113 Algebra	5
OR	
MATH 163A Intro. to Calc.	4
PSY 101 Gen. Psych.	5
PSY 121 Elem. Stat. for Behavioral Sciences	5
ZOOL 150, 151 Intro. to Zool.	12
Arts and Sciences degree requirements, University General Education requirements, and/or electives.	

Sophomore

PHYS 201, 202 Intro. to Physics	8
PSY 226 Experimental Psych.	4
PSY 273 Child & Adolescent	4
PSY 333 Personality	4
SOC 101 Intro. to Soc.	5
ZOOL 301 Human Anat.	6
ZOOL 345 Human Physiology	4
ZOOL 346 Human Physiology Lab.	3
ZOOL 352 Kinesiology	4
Arts and Sciences degree requirements, University General Education requirements, and/or electives.	

Junior

HSAT 329 Intro. to Athletic Training	2
PSY 312 Physiological Psych.	5
PSY 332 Abnormal Psych.	4
PSY 336 Social Psych.	4
PSY 374 Adulthood & Aging	4
English composition	4-5
Arts and Sciences degree requirements, University General Education requirements, and/or electives.	

Senior

HLTH 202 Personal & Community Health	4
PSY 304 Human Learning	4
PSY 310 Motivation	4
OR	
PSY 327 Human Psychophysiology	4
OR	
PSY 351 Clinical & Counseling	4
OR	
PSY 490 Seminar	3-5
PSY 315 Behav. Genet. & Indiv. Diff.	5
PSY 376 Psych. Disord. of Childhood	4
ZOOL 445 Physiology of Exercise	4
ZOOL 446 Physiology of Exercise Lab.	2
Arts and Sciences degree requirements, University General Education requirements, and/or electives.	

The following are suggested electives:

CLNG 127 Greek & Latin Words in Engl.	4
HSS 108 Intro. to Speech Disorders	5
OR	
HSS 336 Speech & Hearing Disorders in Pub. Schools	3
HSS 424 Neuropathologies of Speech & Lang.	4
ZOOL 404 Compar. Vert. Anat.	6
ZOOL 460 Animal Physiology	4
ZOOL 479 Evolution	4

Preparation for Public Administration

(Political Science-Public Administration Major, major code #4200)

The interdisciplinary program in public administration is designed to provide broad training in preparation for a career with local, state, or federal government in the areas of budgeting, personnel administration, intergovernmental relations, program planning and evaluation, and in general administration.

While students may tailor the course of study to meet individualized needs, the following schedule of core courses should be followed closely. In addition, students in the program must meet general requirements for the bachelor of arts degree and the requirements for a major in political science in the College of Arts and Sciences. Students also should be careful to meet the prerequisites for all courses.

For further information and advice, please consult the public administration advisor in the Department of Political Science, Bentley Hall 222.

Freshman

ACCT 201 Financial Acct.	4
ECON 101 Prin.	4
ECON 102 Prin.	4
POLS 101 Am. Nat. Govt.	4
POLS 102 Issues in Am. Politics	4
PSY 121 Elem. Stat. for the Behavioral Sciences	5
University General Education requirements, Arts and Sciences degree requirements, and/or electives.	

Sophomore

CS 220 Intro. to Computing	5
GEOG 230 Intro. to Urban Geog.	4
MGT 200 Intro. to Mgt.	4
POLS 210 Prin. of Pub. Admin.	4
University General Education requirements, Arts and Sciences degree requirements, and/or electives.	

Junior

ECON 303 Microeconomics	4
OR	
ECON 304 Macroeconomics	4
MKT 360 Mkt. for Nonprofit Organizations	4
POLS 304 Politics in the Am. States	5
Arts and Sciences degree requirements and/or electives.	

Senior

HRM 425 Labor Relations	4
OR	
MGT 428 Nonindustrial Labor Relations	4
POLS 412 Pub. Personnel Admin.	4
POLS 422 Fin. Issues in Govt.	4
OR	
POLS 423 Pub. Budgeting	4
POLS 495 Pub. Affairs Internship	5-15
Arts and Sciences degree requirements and/or electives.	

In addition to the courses outlined above, the student must select additional courses in political science to satisfy the requirements for a political science major. The major consists of a total of at least 45 hours in political science, including at least one course each from two of the following three areas: comparative politics, international relations, and political theory.

It is also recommended that students select additional coursework from the following:

ACCT 202 Managerial Acct.	4
ECON 425 Pub. Policy Econ. Analys.	4
ECON 430 Pub. Fin.	4
FIN 325 Managerial Fin.	4
INCO 245 Intro. to Organizational Com.	4
POLS 410 Pub. Policy Analys.	4
POLS 411 Pub. Admin.	4
POLS 413 Admin. Law	5

POLS 414 Organizational Theory	4
OR	
MGT 440 Organization Behavior—Ldrshp & Motivation	4
POLS 424 Intergovernmental Relations	4
POLS 429 Comp. Pub. Admin.	4
QBA 200 Intro. to Bus. Data Analys.	4
SOC 430 Soc. of Organizations	4

Preparation for Systems Analyst in Geography

(Geography-Systems Analyst Major, major code #4235)

The goal of the systems analyst program is to provide a technical background for geographers with an interest in working in business, government, or planning agencies. The major emphasis of the program is threefold: (1) to develop a strong background in the Geography Department; (2) to develop tool courses in other disciplines, primarily mathematics, computer science, and economics, to implement the acquired techniques; and (3) to combine a geography major with a minor in business administration.

Core Curriculum (64 credit hours)

Geography (64 hours)	
GEOG 101 Elem. of Phys. Geog.	5
GEOG 121 Elem. of Cultural Geog.	4
GEOG 130 Econ. Geog.	4
GEOG 201 Envir. & Man	4
277 Anal. of Geographic Data	5
GEOG 327 Resource Mgt.	4
GEOG 360 Map Making	5
GEOG 361 Stat. Cartography	4
GEOG 365 Air Photo Inter.	4
GEOG 380 Remote Sensing	5
GEOG 460 Adv. Cartography	4
GEOG 470 Devel. of Geographic Thought	4
GEOG 477 Quant. Methods in Geog.	4

plus two from the following list:

GEOG 230 Intro. to Urban Geog.	4
GEOG 330 Industrial Location	4
GEOG 420 Land Use Planning	4
GEOG 435 Eval. of Urban Planning	4

Courses to Fulfill Area Requirements of the College of Arts and Sciences

English: (9 hours)

ENG 151 Fr. Comp.: Wrting. & Rhet.	5
ENG 305 J Tech. Wrting.	4

Language Requirement:

Fulfill Arts and Sciences language requirements.

Humanities: (18 hours)

Fulfill Arts and Sciences humanities requirement

Social Science: (18 hours)

Must meet Arts and Sciences social sciences requirements from the following:

BUSL 255 Law & Society	4
BUSL 370 Envir. Law	4
BUSL 442 Law of Property & Real Estate	4
BUSL 475 Govt. & Business	4
ECON 101 Prin.	4
ECON 102 Prin.	4
ECON 213 Current Econ. Prob.	4
ECON 303 Microecon.	4
ECON 304 Macroecon.	4
ECON 313 Econ. of Envir.	4
ECON 381 Stat. for Econ.	4

Natural Science

Must meet Arts and Sciences natural science requirement by taking the following:

Mathematics: (8-10 hours)	
MATH 163A, B Intro. to Calculus	8
OR	
MATH 263A, 263B Analyt. Geom. & Calc.	10
Remedial students must also take MATH 117 and 118.	

Computer science: (10 hours)

CS 220 Intro. to Computing	5
Plus a minor in Computer Science	

Minor in Business Administration

Students must register with the office of the dean of the College of Arts and Sciences and meet current requirements for the minor.

General Education

Complete University General Education requirements.

Electives

To complete their programs students should select the remainder of their courses from the following list:

Computer science:

CS 300 Intro. to Discrete Structures	5
CS 361 Data Structures	5
CS 464 Information Organ. & Retrieval	5

Economics:

ECON 303 Microecon.	4
ECON 304 Macroecon.	4
ECON 305 Managerial Econ.	4
ECON 309 Institutional Econ.	4
ECON 310 Urban Econ.	4
ECON 322 Econ. of Human Resources	4
ECON 356 Regional Devel.	4
ECON 371 Econ. of Planning	4
ECON 430 Pub. Finance	4

Mathematics:

MATH 211 Elem. Linear Algebra	5
OR	
MATH 410 Matrix Theory	5
MATH 263C Analyt. Geom. & Calc.	5
MATH 340 Differential Calc.	5
MATH 443 Math Modeling & Optimization	5
MATH 450A Theory of Stat.	5
MATH 450B Theory of Stat.	5

Philosophy:

PHIL 320 Symbolic Logic I	5
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Preparation for Theology and Religion

(English-Pretheology Major, major code #5233)

(History-Pretheology Major, major code #4213)

(Philosophy-Pretheology Major, major code #5242)

It is recommended that a student planning to enter a theological seminary or to do graduate study in religion take a broad program of undergraduate courses including the following (with minimal quarter hours of credit suggested in each area): philosophy (12); Bible and history of religions (15); English composition and literature and world literature (21); history, including HIST 354 and 370 (15); social sciences (21); foreign languages (18, preferably in Greek, Latin, French, or German); natural sciences (9); public speaking (3). The course program should be arranged to meet the requirements of the bachelor of arts degree and the University General Education requirements. It is advisable to major in philosophy, English, or one of the social sciences. The student should also check the entrance requirements of the theological seminary or graduate school of his or her choice and plan his or her curriculum accordingly.

Preparation for Urban and Regional Planning

(Geography-Urban Planning Major, major code #4234)

This special curriculum is designed to provide some of the basic academic requirements for students considering careers in urban planning in the United States. While working toward a conventional bachelor of science degree in geography, students take certain required courses and select from an approved list of electives both inside and outside the Department of Geography which emphasize

legal, social, political, and historical aspects of the planning profession. These courses simultaneously fulfill some of the department and college requirements. The distinctiveness of the curriculum comes from the direction given the student and the preselection of courses in which the student may enroll; it is this which separates this special curriculum from the general geography program. Students entering the course of study must abide by the regulations of the College of Arts and Sciences pertaining to undergraduate degrees. These include a minimum of 192 credit hours; requirements concerning the geography major, English composition, and foreign language; level of study; and area requirements in humanities, social sciences, and natural sciences. Students wishing to enroll in the preparation for urban and regional planning major should contact the chairman of the Department of Geography as soon as possible, preferably not later than the beginning of their sophomore year.

The majority of job opportunities for planners are with government agencies at the local, state, and federal levels. Their activities largely concern administration and implementation of federal programs and continued funding depends upon the Congress. Whereas a bachelor's degree can facilitate initial entry into the planning profession, job descriptions usually specify a master's degree and it is recommended that students continue toward such a degree, involving an additional two years of study, offered by over 70 American universities.

Core Curriculum (51 credit hours)

Geography (26 hours)

GEOG 230 Intro. to Urban Geog.	4
GEOG 277 Anal. of Geog. Data	5
GEOG 360 Map Making	5
GEOG 420 Land Use Planning	4
GEOG 421 Environmental Planning	4
GEOG 435 Evolution of Planning	4

Other Departments (25 hours)

These courses concurrently fulfill the social science area requirement of the College of Arts and Sciences.

ECON 101 Prin.	4
ECON 102 Prin.	4
ECON 310 Urban Econ.	4
MGT 300 Mgt.	4
POLS 320 Urban Politics	5
SOC 424 Urban Soc.	4

Additional Courses to Fulfill the Geography Major Requirement (26 credit hours)

Combine with courses in the core curriculum for a total of 52 credit hours in geography:

GEOG 101 Intro. to Phys. Geog.	5
GEOG 121 Elements of Cultural Geog.	4
GEOG 130 Econ. Geog.	4
GEOG 311 Meteorology	5
GEOG 470 Devel. of Geog. Thought	4
One course from GEOG 240, 242, 340, 343, 345, 351, 352, 355	

Additional Courses to Fulfill Area Requirements of the College of Arts and Sciences*

Foreign Language Requirement (24 credit hours). The language requirement is the same as for all other B.S. degree programs in the College of Arts and Sciences.

Humanities Area Requirement (18 credit hours). These requirements are the same as for all other B.S. degree programs in the College of Arts and Sciences. Select CA 350 Principles of Architecture (3) and CA 354 19th- and 20th-Century Architecture (3) in partial fulfillment of the Arts and Sciences humanities area requirement.

*The student and the advisor should devise a plan which accounts for the University General Education requirements.

Natural Science Area Requirement (18 credit hours). This requirement is the same as that for all other B.S. degree programs in the College of Arts and Sciences. One or more of the following courses are recommended as partial fulfillment of the requirement:

GEOG 101 Intro. to Geol.	5
GEOG 330 Prin. of Geomorph.	5
GEOG 432 Origin & Classification of Soils	4

Electives

Completion of the above requirements leaves 56 credit hours to be taken to fulfill the 192 credit hours necessary for graduation. The student should try to take these from among the following:

Within the College of Arts and Sciences

Any Geography Department courses EXCEPT GEOG 140, 141, and 142

BUSL 370 Environ. Law	4
BUSL 422 Law of Property & Real Estate	4
ECON 213 Current Econ. Prob.	4
ECON 260 Money & Banking	4
ECON 301 Intro. to Econ. Analys.	4
ECON 302 Intro. to Econ. Analys.	4
ECON 303 Microecon.	4
ECON 304 Macroecon.	4
ECON 356 Regional Devel.	4
HIST 317A Ohio Hist. to 1851	4
HIST 317B Ohio Hist. since 1851	4
POLS 101 Amer. Nat. Govt.	4
POLS 102 Issues in Amer. Politics	4
POLS 408 Urban Pub. Admin.	4
POLS 410 Pub. Policy	4
POLS 424 Intergovernmental Relations	4
PSY 355 Environ. Psychology	4
SW 101 Intro. to Soc. Welfare and Social Work	3
SW 290 Soc. Welfare as an Institution	4
SW 391 Soc. Sec. System	4
SW 392 Contemp. Am. Soc. Services	4
SW 395 Aging in the Welfare State	4
SOC 101 Intro. to Soc.	5
SOC 201 Contemp. Social Prob.	4
SOC 230 Soc. of Poverty	4
SOC 425 Rural Soc.	4

Outside the College of Arts and Sciences

CE 361 Transportation & Engineering	4
INCO 205 Group Discussions	4
INCO 404 Prin. & Tech. of Interviewing	4
RET 102 Real Estate Appraising	4
RET 201 Real Estate Prin. & Prac. I	4
RET 204 Real Estate Fin.	4
HREC 310 Prog. Planning & Facil. for Recreation	5

Preparation for Veterinary Medicine

(Zoology-Preveterinary Medicine Major, major code #2508)

Most schools of veterinary medicine require a bachelor's degree for admission. The Veterinary Aptitude Test must be taken during the calendar year previous to the year in which the student expects to enroll in veterinary school.

The practice of most schools of veterinary medicine is to admit only residents of the state in which the schools are located. Exceptions to this generally are by contractual agreement with states which have no schools of veterinary medicine. Early in his or her college career the pre-veterinary medicine student should identify the schools to which he or she might be eligible for admission and become familiar with the specific entrance requirements of those schools.

The student should bear in mind that admission to a school of veterinary medicine is highly competitive and that successful applicants not only have achieved outstanding, well-rounded academic records but also have presented a demonstrable genuine interest in the profession of veterinary medicine.

Preveterinary medicine students majoring in zoology will be required to complete the following program, which must include at least 45 hours of zoological and biomedical sciences coursework. Additional selections from the recommended electives listed after the junior-senior program are encouraged.

Freshman

CHEM 141 Fundamentals of Chem.	5
CHEM 142 Fundamentals of Chem.	5
CHEM 143 Quant. Analys.	5
ENG 151 Fr. Comp.: Wrting. & Rhet.	5
MATH 163A, B Intro. to Calc.*	8
OR	
MATH 263A, B Analyt. Geom. & Calc.	10
ZOOL 150 Intro. to Zool.	6
ZOOL 151 Intro. to Zool.	6
Arts and Sciences degree requirements, University General Education requirements, and/or electives.	

*Of the choices, this is recommended.

Sophomore

CHEM 301, 302 Organic (short)	6
CHEM 303, 304 Organic Lab.	5
PHYS 201, 202, 203 Intro.	12
ZOOL 303 Compar. Vert. Anat.	6
ZOOL 325 Gen. Genetics	5
Arts and Sciences degree requirements, University General Education requirements, and/or electives.	

Junior-Senior

English composition	4-5
MICR 411 Gen. Microbiol.	6
ZOOL 460 Animal Physiology	5
ZOOL 461 Animal Physiology Lab.	4
ZOOL 463 Cell Chem.	4
OR	
CHEM 490 and 491 Intro. to Biochem.	6
OR	
CHEM 491 Basic Biochem.	4
Arts and Sciences degree requirements, University General Education requirements, and/or electives.	

Recommended electives:

MICR 415 Immunology	6
ZOOL 404 Compar. Vert. Anat. (Mammalian)	6
ZOOL 406 Vertebrate Embryology	6
ZOOL 441 Parasitology	6
Students who elect the degree <i>in absentia</i> option must complete a minimum of 36 hours in zoological and biomedical sciences. Students who complete the four-year program must complete a minimum of 45 hours in zoological and biomedical sciences.	

Preparation for Water Resources

(Geological Sciences-Water Resources Major, major code #3322)

This curriculum is recommended for students who wish to specialize in the investigation of surface water and groundwater supplies. The student entering the program majors in geology as a B.S. degree candidate, and takes additional coursework in mathematics, chemistry, physics, and civil engineering. Graduates of the program are qualified to seek professional employment in hydrogeology or to enter graduate school for additional training.

Students should enter the program as freshmen in order to complete the required curriculum in four years.

Freshman

CHEM 141 Fundamentals of Chem.	5
CHEM 142 Fundamentals of Chem.	5
CHEM 143 Quant. Analys.	5
GEOL 101 Intro. to Geol.	5
GEOL 330 Prin. of Geomorph.	5
MATH 263A, 263B, 263C Analyt. Geom. & Calc.	15
English composition	5
Arts and Sciences degree requirements (including language), University General Education requirements, and/or electives.	

Sophomore

GEOL 310 Rocks & Minerals	5
GEOL 350 Stratigraphy—Sedimentology	4
GEOL 360 Struct. Geol.	4
MATH 340 Diff. Equations	5
PHYS 251, 252, 253 Gen. Phys.	15
Arts and Sciences degree requirements (including language), University General Education requirements, and/or electives.	

Junior

CE 220 Statics	4
GEOL 462 Geodynamics: Earth's Interior	4
GEOL 480 Hydrogeology (I)	4
GEOL 481 Hydrogeology (II)	4
ME 224 Dynamics	4
GEOL 483 (6) to be taken during the summer of the third year. Arts and Sciences degree requirements (including language), University General Education requirements, and/or electives.	

Senior

CE 340 Fluid Mechanics	5
CE 343 Hydrology	4
CS 220 Intro. to Comput. for Engr. & Phys. Sciences	5
GEOL 476 Subsurface Methods	4
GEOL 482 Groundwater	4
GEOL 485 Exploration Geophysics	4
Arts and Sciences degree requirements (including language), University General Education requirements, and/or electives.	

Additional coursework in civil engineering (415, 451, 452), botany (101, 101H, 102, 103, 311), microbiology (211, 212), zoology (390), and economics is recommended as elective courses to be taken in the senior year.

Preparation for Wildlife Biology

(Zoology-Wildlife Biology Major, major code #2515)

The Program in Ecology, Behavior, and Evolution, in the Department of Zoological and Biomedical Sciences, provides a program for undergraduate students in zoology who are interested in careers in the conservation and management of wildlife, or in the determination, establishment, and application of the biological facts, principles, methods, techniques, and procedures necessary for the conservation and management of wildlife. Graduates of this program will meet the course qualifications for state and federal civil service registers as ecologist, wildlife biologist, wildlife refuge manager, zoologist, and general biologist. This program will also provide undergraduate training for students planning to go on to graduate school in wildlife biology or an allied discipline such as mammalogy, ornithology, or animal ecology.

Freshman

BOT 111 Intro. to Bot.	6
CHEM 141, 142, 143 Fund. of Chem.	10
PSY 121 Elem. Stat.	5
ZOOL 150, 151 Intro. to Zool.	12
English composition	5
Arts and Sciences degree requirements, University General Education requirements, and/or electives.	

Sophomore

CHEM 301, 302 Organic Chem.	6
MATH 163A, 163B Intro. to Calc.	8
PHYS 201, 202 Intro. to Phys.	8
ZOOL 325 Genetics	5
ZOOL 376 Ecology Lab.	3
Arts and Sciences degree requirements, University General Education requirements, and/or electives.	

Junior-Senior

English composition	4-5
(1) A minimum of 14 hours in wildlife subjects selected from the following:	
ZOOL 375 Animal Ecology	3
ZOOL 471 Ornithology	3
ZOOL 474 Mammalogy	6
ZOOL 477 Population Ecology	4
ZOOL 485 Undergrnd. Research	1-1

(2) A minimum of 18 hours in zoology. ZOOL 151, 325, and 376 are included; select additional electives from:

ZOOL 303 Comp. Vert. Anat.	6
ZOOL 430 Invert. Zool.	6
ZOOL 431 Limnology	4
ZOOL 439 Field Entomology	5
ZOOL 440 Sociobiol.	4
ZOOL 457 Animal Systematics	4
ZOOL 460 Animal Physiology	4
ZOOL 468 Ichthyology	4
ZOOL 472 Herpetology	5
ZOOL 473 Animal Behavior	5
ZOOL 479 Evolution	4

(3) A minimum of 14 hours in plant sciences. BOT 111 is included; select at least 8 additional hours from:

BOT 247 Veg. of North Am.	4
BOT 248 Trees & Shrubs	5
BOT 308 Morph. of Vascular Plants	6
BOT 309 Plant Systematics & Ohio Flora	5
BOT 425 Plant Ecology	5

Women's Studies Certificate Program

This program is available as an option in any baccalaureate degree program offered by the University, regardless of the college in which the student is enrolled.

See the *Courses of Instruction* section of this catalog for the Women's Studies Certificate Program requirements.

Preparation for Zoology-Nutrition

(Zoology-Nutrition Major, major code #2510)

(Human Nutrition and Food Science, School of Home Economics, College of Health and Human Services, Option D, Nutrition-Zoology)

This program provides a basis for those students desiring graduate study and research in nutrition and/or zoology. The program meets American Dietetic Association academic requirements for the clinical area of specialization and qualifies students for dietetic internships with a clinical emphasis.

The course sequence should be adhered to closely and always in consultation with an advisor assigned to the student either in the Department of Zoological and Biomedical Sciences or in the School of Home Economics.

Should a student choose, he or she can major in the Department of Zoological and Biomedical Sciences, College of Arts and Sciences; or the same program may be pursued leading to a major in the School of Home Economics, College of Health and Human Services (see listing under Option D, Nutrition-Zoology, Human Nutrition and Food Science, School of Home Economics, College of Health and Human Services).

Freshman

BOT 111 Intro. to Bot.	6
CHEM 141, 142 Fundamentals of Chem.	10
CHEM 143 Quant. Analysis.	5
HEFN 128 Intro. to Nutrition	4
HEFN 222 Food Science Prin.	4
PSY 101 Intro. to Psych.	5
MATH 163A, 163B Intro. to Calc.	8
ZOOL 150, 151 Intro. to Zool.	12
English composition	5
Arts and Sciences college degree requirements, University General Education requirements, and/or electives.	

Sophomore

CHEM 301, 302 Organic Chem.	6
CS 220 Intro. Comput.	5

ECON 101, 102 Intro. to Econ.	8
HECF 160 Intro. to Child Develop.	4
OR	
HECF 371 Family Develop.	4
HEFN 299 Soph. Practi.: Prof. Awareness	2-5
PHYS 201, 202 Intro. to Phys.	8
PSY 121 Elem. Stat.	5
PSY 275 Educational Psych.	4
ZOOL 325 Genetics	5
Arts and Sciences college degree requirements, University General Education requirements, and/or electives.	

Junior

HEFN 399 Jr. Practi.: Prof. Assessment	2-5
HEFN 429 Community Nutrition	3
INCO 101 Fundamentals of Speech	4
OR	
INCO 103 Pub. Spkng.	3
MICR 411 General Microbiol.	6
OR	
MICR 211, 212 Environmental Micr.	6
MGT 300 Intro. to Mgt.	4
ZOOL 303 Comp. Vert. Anat.	6
OR	
ZOOL 300 Elem. of Human Anat. & Histol.	6
ZOOL 463 Cell Chem.	4
ZOOL 464 Physiological Chem. Lab.	3
ZOOL 482D Mammalian Physiology	6
English composition	5
Arts and Sciences college degree requirements, University General Education requirements, and/or electives.	

Senior

HEFN 400 Sr. Seminar	1
HEFN 422 Experimental Foods	4
HEFN 428 Adv. Nutrition	4
HEFN 430 Therapeutic Nutrition	4
HEFN 431 Studies of Science of Nutrition	4
HEFN 499 Field Experience	5-12
SOC 101 Intro. to Soc.	5
OR	
SOC 301 Prin. of Soc.	5
Arts and Sciences college degree requirements and/or electives.	

Students majoring in zoology must fulfill Arts and Sciences degree requirements including a language (Spanish is recommended for this program).

Students pursuing this program in the School of Home Economics should see the listing under the College of Health and Human Services for specific degree requirements in that college.

Additional suggested courses include:

HEFN 120 Meal Mgt.	3
HEFN 334 Quantity Food Production	4
HEFN 423 Food Preservation	4
HEFN 426 World View of Nutrition	3
MICR 417 Adv. General Microbiol.	6

Possible Course Sequence for Zoology-Nutrition Program:

Freshman

CHEM 141 5	CHEM 142 5	CHEM 143 5
HEFN 128 4	HEFN 222 4	MATH 163B .. 4
PSY 101 5	MATH 163A .. 4	ZOOL 151 6
English comp. 5	ZOOL 150 6	

Sophomore

CHEM 301 3	CHEM 302 3	ECON 102 4
HECF 160/371 4	ECON 101 4	HEFN 200 3
PSY 121 5	PHYS 201 4	PHYS 202 4
Comp. Sci. 5	PSY 275 4	ZOOL 325 5

Junior

HEFN 399 .. 2-5	MGT 300 4	HEFN 429 3
INCO 101/103		
..... 3-4	ZOOL 411 6	ZOOL 303 6
ZOOL 463 4	ZOOL 482D ... 3	ZOOL 482D ... 3
ZOOL 464 3	Electives 4	English
		comp. 5

Senior

HEFN 400 1	HEFN 430 4	HEFN 422 4
HEFN 428 4	Electives 12	Electives 12
HEFN 431 3		
SOC 101/		
301 5		
Electives 4		

College of Business Administration

John E. Stinson, *Dean*

Herschel R. McNabb, *Assistant Dean*

The College of Business Administration seeks to prepare men and women for professional careers in business, government, and nonprofit organizations. Consistent with its purpose, the college provides a base of liberal education needed by all educated persons in our society, business-oriented instruction in professional fields, and a close association with other colleges so as to promote knowledge and understanding from a variety of sources.

Business instruction and research center around three themes: preparation of the manager for a variety of business activities; development of analytical skills; and fostering of a critical awareness of the social, political, and economic environment in which decisions are made.

The academic departments offer major fields of study in accounting, business law, computer systems in business, finance, general business, management, health care management, human resource management, international business, marketing, production management, and quantitative business analysis. A major in business economics is available also.

In addition, the Center for Business Enterprise provides both educational programs for external organizations and opportunities for students and faculty to engage in meaningful projects.

The College of Business Administration has been a fully accredited member of the American Assembly of Collegiate Schools of Business since 1950.

BACHELOR OF BUSINESS ADMINISTRATION

A candidate for the bachelor of business administration (B.B.A.) degree must complete the University's General Education requirements for graduation, the English composition requirements, and fulfill a minimum of 192 quarter hours' credit with a point-hour ratio of 2.0 (C) average on all hours attempted. This 2.0 (C) point-hour requirement applies to the record on courses taken in business and economics, and also to courses in the student's major. The College of Business Administration limits transfer credit for required business courses taken at a lower division level to such courses as it offers at that lower level. Other transfer credits accepted by the University are evaluated as either business or nonbusiness electives.

Courses included in the 192-hour minimum for the B.B.A. degree must be chosen so that at least 77 quarter hours are earned in areas of business and economics and at least 77 quarter hours are earned in nonbusiness areas. However, eight hours of economics principles may be counted in either minimum. Among the nonbusiness courses, a student must complete INCO 103, MATH 163A, MATH 250B, and at least six quarter hours in each of three broad areas: humanities, natural science, and social science. Only three quarter hours of activity-type courses in the area of health, physical education, and recreation are acceptable within the 192 hours of credit toward the B.B.A. degree. A minimum of 48 credit hours must be completed after admission to the college in order to meet the college's residency requirement.

ENROLLMENT POLICIES

Freshmen entering Ohio University may receive direct admission into a major program of the College of Business Administration if they have graduated in the top one-half of their high school class, or achieve a combined score of 1000 or higher on the SAT, or a combined score of 22 or higher on the ACT. See the section Freshman Applications under Application Procedures in the front of this bulletin. Students in the lower one-half of their high school class will be classified as prebusiness majors and will be assigned faculty advisors in the College of Business Administration, but will be administratively housed in the University College. Students in the lower one-half of their high school class must achieve a minimum accumulative grade-point average of 2.0 in the preprofessional core requirements (ECON 101, ECON 102, MATH 163A, MATH 250B, ENG 151 or 152 or 153, ACCT 201, ACCT 202, CSB 200, QBA 201, and BUSL 255) in order to qualify for admission to a major program in the College of Business Administration.

Ohio University students in other colleges within the University, and students from other institutions of higher education, transferring to the College of Business Administration must achieve a minimum accumulative grade-point average of 2.0 in the preprofessional core requirements (ECON 101, ECON 102, MATH 163A, MATH 250B, ENG 151 or 152 or 153, ACCT 201, ACCT 202, CSB 200, QBA 201, and BUSL 255, or equivalent courses) in order to qualify for admission to a major program in the college.

CURRICULUM

All candidates for the B.B.A. degree must complete a core of courses covering a common body of knowledge in the tools of analysis and the operational fields of business (preprofessional core) plus a concentration in the major area. Only the preprofessional core courses may be taken, as indicated below, during the freshman and sophomore years. This permits the student (1) to acquire an early foundation in the basic arts and sciences before specializing in business during the junior and senior years and (2) the flexibility to choose alternative fields of study in cases of interest change. Students must complete the preprofessional core with an accumulative grade-point average of 2.0 by the time they have earned 90 hours of credit. Students who do not meet these requirements may be given one quarter's probation to achieve the standard. If at the end of the probationary quarter a student has not fulfilled the requirement, he or she will be dropped from the college. The recommended sequencing of courses is:

Freshman	
ECON 101, 102. Prin.	8
INCO 103	4
MATH 163A Intro. to Calculus	5
MATH 250B Finite	5
Humanities (minimum)	6
Natural sciences (minimum)	6
Social sciences (minimum)	6
Electives	10
Sophomore	
ACCT 201 Financial Acct.	4
ACCT 202 Managerial Acct.	4
BUSL 255 Law & Society	4
CSB 200 Intro. to Business Computers	4
QBA 201 Intro. to Probabilities & Stat.	4
Electives	28
Junior	
BA 310 Prod. Mgt.	4
ECON 305 Managerial Econ.	4
FIN 325 Managerial Finance	4
MGT 300 Mgt.	4
MGT 325J Comm. Behavior in Mod. Organization	4
MKT 301 Mkt. Prin.	4
Major courses & electives	24
Senior	
BA 470 Administrative Policy	4
Major courses & electives	44

MAJOR — AREA OF CONCENTRATION

Each candidate for the B.B.A. degree must designate a major or area of concentration and complete the courses required by the department offering the major. The majors are listed below. The course requirements for each major are indicated in this section.

Accounting
Business Economics
Business Prelaw
Computer Systems in Business
Finance
General Business (see Business Administration in the *Courses of Instruction* section)
Health Care Management
Human Resource Management
International Business
Personnel and Industrial Relations
Management
Marketing
Production Management

Quantitative Business Analysis

NOTE: For pass/fail option, see the *Guidelines and General Information* section of this bulletin.

The Accounting Major

(Major code #6121)

The curriculum for accounting majors is designed to give the students a broad understanding of basic business fundamentals plus an opportunity to concentrate in one or more special fields of accounting. The students also have the opportunity to broaden both their interests and their nontechnical knowledge and skills by taking courses from faculty from many different departments of the University. At least 40 percent of the degree requirements must be taken from divisions and departments other than the College of Business Administration and Department of Economics.

The accounting major is given an opportunity to study general accounting theory and, in addition, may specialize in managerial accounting (controllershship), public accounting (CPA), tax accounting (private practice or with the IRS), governmental accounting, industrial/cost accounting, or institutional accounting. As an alternative to securing direct entry into an accounting position upon graduation, some students major in accounting for a good, solid background education. Accounting has proven to be an excellent foundation for advancement to top executive positions for many graduates.

The special needs of an accounting major can be selectively chosen from the following list of courses, or, by properly selecting the electives, the student may prepare himself or herself for a variety of interesting and challenging positions other than accounting. The advisor can help select the necessary elective courses which will allow specialization or broadening of the field of interest.

There are scholarships and achievement awards available from several sources. The Accounting Department awards scholarships to entering freshmen who have evidenced good potential for accounting ability, based on their high school records and test scores. In addition, the department grants achievement awards to those students who excel in gaining technical knowledge in accounting. These are based on merit alone; need is not a factor. All of these departmental awards are in addition to those that the University and the College of Business Administration have available each year to accounting and other majors.

Suggested Course Sequence

Freshman

Fall	
ECON 102	4
MATH 163A	5
English	5
NonCBA elective*	2
<hr/>	
16	

Winter

ECON 101	5
MATH 250B	4
NonCBA electives*	7
<hr/>	
16	

Spring

INCO 103	4
NonCBA electives*	12
<hr/>	
16	

Sophomore

Fall

ACCT 201	4
BUSL 255	4
CSB 200	4
NonCBA elective*	4
	<u>16</u>

Winter

QBA 201	4
ACCT 202	4
NonCBA electives*	8
	<u>16</u>

Spring

ACCT 203	4
NonCBA electives*	12
	<u>16</u>

Junior

Fall

ACCT 217	4
ACCT 310	4
MGT 300	4
NonCBA electives*	4
	<u>16</u>

Winter

ACCT 304	4
ACCT 317	4
MGT 325J	4
MKT 301	4
	<u>16</u>

Spring

ACCT 305	4
ACCT 345	4
BA 310	4
FIN 325	4
	<u>16</u>

Senior

Fall

ACCT 451	4
ECON 305	4
CBA elective	4
NonCBA elective*	4
	<u>16</u>

Winter

BA 470	4
BUSL 357	4
Accounting elective	4
NonCBA elective*	4
	<u>16</u>

Spring

Accounting elective	4
CBA elective	4
NonCBA electives	8
	<u>16</u>

*To meet the nonCBA requirements of 77 hours, including two courses in humanities, natural sciences, and social sciences.

Business Economics Major

(Major code #6124)

The B.B.A. business economics program is designed to provide a broad business background and is intended for those who plan careers in business and economic research for both private firms and government, in banking, and in marketing analysis. It is also an important component for business management, law, production management, and financial analysis.

Suggested Course Sequence

Freshman

Fall

ECON 102 Prin.	4
Humanities	4
Natural science	4
Elective	4

Winter

ECON 101 Prin.	4
MATH 163A Intro. to Calculus	5
Natural science	4
Social science	4

Spring

INCO 103	4
MATH 250B Finite	5
Humanities	4
Social science	4

Sophomore

Fall

CSB 200 Intro. Bus. Comput.	4
BUSL 255 Law & Society	4
Electives	8

Winter

QBA 201 Intro. to Prob. & Stat.	4
ACCT 201 Financial Acct.	4
Electives	4

Spring

ACCT 202 Managerial Acct.	4
CBA elective	4
Electives	8

Junior

Fall

MGT 325J Comm. Behavior in Mod. Org.	4
FIN 325 Managerial Finance	4
ECON 304 Macroecon.	4
Elective	4

Winter

ECON 305 Managerial Econ.	4
MGT 300 Management	4
Economics elective	4
Elective	4

Spring

BA 310 Prod. Mgt.	4
MKT 301 Mkt. Prin.	4
ECON 385 Intro. Econ. Method & Res.	4
Elective	4

Senior

Fall

BA 470 Bus. Policy	4
Economics elective	4
Electives	8

Winter

Economics elective	4
Electives	12

Spring

Electives	16
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Business Prelaw Major

(Major code #6120)

It should be recognized that law schools do not prescribe any rigid undergraduate curriculum. A very substantial number of prelaw students, however, do choose one of the business fields of study as their major field for the baccalaureate degree. They may wish to combine the business prelaw major along with one of the other majors in the College of Business Administration if the profession of

law is to be their ultimate career goal.

The business prelaw major recognizes the business and economic emphasis of the practice of law, and also provides the breadth of training and philosophical background which is conducive to success in a law school.

Students who decide to major in business prelaw must follow the requirements in one of the other majors in the College of Business Administration, which include accounting, business economics, computer systems in business, finance, general business, health care management, human resource management, international business, management, marketing, production management, and quantitative business analysis. In addition to following the requirements of one of the other majors in the College of Business Administration, students must complete 16 hours at the 300-400 level, including BUSL 356 and four additional hours in business law beyond 356 as selected by the student with the approval of his or her prelaw major advisor. A further eight hours should be selected from the following: ACCT 217 (Introduction to Taxation), ACCT 317 (Federal Income Taxes), ECON 430 (Public Finance), HRM 425 (Labor Relations), POLS 401 and 402 (Constitutional Law), POLS 403 (Judicial Process), POLS 409 (Law Enforcement), POLS 411 (Public Administration), POLS 413 (Administrative Law). Students may also request from their business prelaw advisors written permission to substitute a course different from those listed above. With their advisors' approval, students should elect additional courses in nonbusiness fields, especially American government, American and English history, English, philosophy, and interpersonal communication.

The law faculty in the College of Business Administration is prepared to assist prelaw students in a number of ways:

1. Several departmental faculty members give extensive time to counseling students regarding selection of courses, the Law School Admission Test, law school application procedures, and other matters of importance to prelegal education.

2. Law School Admission Test (LSAT) and Law School Data Assembly Service (LSDAS) are available from the prelaw advisor.

3. The department maintains ties with the Criminal Justice Program administered by the University College.

4. The department maintains ties with faculty and staff at various law schools in the country.

Suggested Course Sequence

Following is a suggested program of study for the business prelaw major using management as the business major selected. Requirements for the various business majors vary by the number of hours required and this illustration will need to be modified for other business majors used in combination with the business prelaw major.

Freshman

Fall

ECON 101 Prin. of Econ.	4
ENG 151 Fr. Comp.: Wrting. & Rhet.	5
Social science requirement	2-5
Elective (MATH 113 unless math background is strong)	5

Winter

ECON 102 Prin. of Econ.	4
INCO 103 Pub. Spkng.	4
MATH 163A Intro. to Calculus	5
Humanities requirements	4

Spring

MATH 250B Finite	5
Natural science requirement	4
Elective	4
Elective	4

Sophomore

Fall

ACCT 201 Financial Acct.	4
CSB 200 Intro. Bus. Comput.	4
Humanities requirement	2-5

Winter

ACCT 202 Managerial Acct.	4
QBA 201 Intro. to Bus. Stat.	4
Natural science requirement	2-5
Elective	2-5

Spring

BUSL 255 Law & Society	4
Social science requirement	2-5
Elective	2-5

Junior

Fall

ECON 305 Managerial Econ.	4
MGT 300 Mgt.	4
MGT 440 Organizational Ldrshp. & Motiv.	4
MGT 325J Comm. Behavior in Mod. Organization	4

Winter

FIN 325 Managerial Finance	4
BUSL 356 Law of the Mgt. Proc.	4
BA 310 Prod. Mgt.	4
HRM 420 Admin. of Personnel	4
Elective	4

Spring

MGT 430 Mgt. System: Decision-making	4
MKT 301 Mkt. Prin.	4
Business prelaw course	4
Advanced business law course	4

Senior

Fall

Management major elective	2-5
Supporting field elective	2-5
Business prelaw course	4
Elective	2-5

Winter

Management major elective	2-5
Supporting field elective	2-5
Business prelaw course	4
Elective	2-5

Spring

BA 470 Admin. Policy	4
Supporting field elective	2-5
Elective	2-5
Elective	2-5

Computer Systems in Business Major

(Major code #6131)

The Computer Systems in Business (CSB) major is unique in its emphasis on applying computers to automate businesses; the approach is applications oriented rather than technical. CSB majors will not be trained to work within computer centers, but will rather be trained to assist with the rapidly progressing computerization of managerial users. CSB majors can be expected to become either expert managerial computer users or intermediaries between the users and the computer centers.

Being able to communicate with both management and computer specialists makes them ideal candidates for liaison roles in organizations. Often such experience can lead to higher management positions because of the exposure it offers to problems and procedures throughout a company.

In addition to the core curriculum for all candidates for the bachelor of business administration degree, a student

majoring in computer systems in business has the following course requirements: CSB 320 Introduction to Business File Processing, CSB 330 COBOL I, CSB 380 Business Database I, CSB 390 Business Systems I, CSB 435 COBOL II, CSB 480 Business Database II, and CSB 490 Business Systems II.

Suggested Course Sequence

Freshman	
MATH 163A, 250B	10
ECON 101, 102	8
INCO 103	4
English and humanities	6
Social sciences requirement	6
Nonbusiness electives	14
	48
Sophomore	
ACCT 201 & 202	8
CSB 200 & QBA 201	8
BUSL 255	4
Natural science requirement	6
Nonbusiness electives	22
	48
Junior	
CSB 320 Intro. to Bus. File Process	4
CSB 330 COBOL I	4
CSB 380 Business Database I	4
CSB 390 Business Systems I	4
Business core requirements (MGT 300, MGT 325J, MKT 301, BA 310, FIN 325)	20
Business or nonbusiness electives	12
	48
Senior	
CSB 435 COBOL II	4
CSB 480 Business Database II	4
CSB 490 Business Systems II	4
Business core courses (ECON 305, BA 470)	8
Business or nonbusiness electives	28
	48

Finance Major

(Major code #6125)

The finance major prepares professionals who are concerned with the development and utilization of funds for economic and social purposes. Coursework is available in the fields of financial management (both national and international), commercial banking, financial institutions, security markets, and risk and insurance.

Typically, upon graduation, the finance major obtains direct entry positions in such areas as the financial banking community, insurance, government services, or in an array of industries which employ financial analysts, decision makers, financial strategists, budgeting officers, and planners.

Suggested Course Sequence*

Freshman	
<i>Fall</i>	
ECON 101 Prin. of Econ.	4
MATH 163A Intro. to Calculus	5
Electives**	7
<i>Winter</i>	
ECON 102 Prin. of Econ.	4
MATH 250B Finite	5
Electives**	7
<i>Spring</i>	
INCO 103	4
Electives**	12

Sophomore

<i>Fall</i>	
ACCT 201 Financial Acct.	4
CSB 200 Intro. Bus. Comput.	4
Electives**	8
<i>Winter</i>	
ACCT 202 Managerial Acct.	4
QBA 201 Intro. to Bus. Stat.	4
Electives**	8
<i>Spring</i>	
BUSL 255 Law & Society	4
Electives**	12

Junior

<i>Fall</i>	
BA 310 Prod. Mgt.	4
ECON 305 Managerial Econ.	4
FIN 325 Managerial Finance	4
FIN 327 Banking & Financial Sys.	4
<i>Winter</i>	
MKT 301 Prin. of Mkt.	4
MGT 300 Management	4
FIN 341 Investments	4
Elective**	4
<i>Spring</i>	
MGT 325J Comm. Behavior in Mod. Org.	4
FIN 445 Portfolio Mgt.	4
FIN 331 Risk & Insurance	4
Elective**	4

Senior

<i>Fall</i>	
BA 470 Admin. Policy	4
FIN 461 Prob. in Bus. Finance	4
Electives**	8
<i>Winter</i>	
FIN 428 Mgt. of Financial Inst.	4
Electives**	12
<i>Spring</i>	
Electives**	16

*The outlined courses are intended to act as a guide, not as a required sequence. For example, some freshmen should not take MATH 163A first quarter but should instead enroll in MATH 113 or another math course more basic than 163A. A factor influencing this decision is the math course proficiency of the individual student. Decisions throughout the four-year program can best be reached by students consulting a faculty advisor for guidance.

**A minimum of 77 hours of nonbusiness courses is required including—six hours in humanities, six hours in natural science, six hours in social science, and the required ten hours of mathematics included in the core courses.

General Business Major

(Major code #6122)

The general business major prepares professionals on a broad basis for business careers. Five upper-level courses are required from the following area/disciplines: accounting, computer systems in business, quantitative business analysis, management, business law, finance, marketing, production, business administration, and economics (economics course selection restricted to ECON 303, 304, 320, 332, 360, or 430). Each such course will be in a different functional area and/or discipline. This major is of special interest to those students who have a generalized view of business and do not possess strong interests in any one concentration.

Upon graduation, the general business major enters what may be the broadest area of positions of any major within the College of Business Administration. Recent

general business majors have entered such fields as sales, banking, government services, personnel, advertising, small business entrepreneurship, production, and insurance.

Suggested Course Sequence*

Freshman

Fall

ECON 102 Prin. of Econ.	4
MATH 163A Intro. to Calculus	5
Nonbusiness electives**	

Winter

ECON 101 Prin. of Econ.	4
MATH 250B Finite	5
Nonbusiness electives	

Spring

INCO 103	4
Nonbusiness electives	

Sophomore

Fall

ACCT 201 Financial Acct.	4
CSB 200 Intro. to Bus. Computers	4
Nonbusiness electives	

Winter

ACCT 202 Managerial Acct.	4
QBA 201 Intro. to Bus. Stat.	4
Nonbusiness electives	

Spring

BUSL 255 Law & Society	4
Nonbusiness electives	

Junior

Fall

BA 310 Prod. Mgt.	4
ECON 305 Managerial Econ.	4
Accounting 300-400 level	4
Business or nonbusiness electives	

Winter

FIN 325 Managerial Finance	4
MGT 300 Mgt.	4
Finance 300-400 level	4
Business or nonbusiness electives	

Spring

MGT 325J Comm. Behavior in Mod. Organization	4
MKT 301 Prin. of Marketing	4
Management 300-400 level	4
Business or nonbusiness electives	

Senior

Fall

BA 470 Administrative Policy	4
Marketing 300-400 level	4
Business or nonbusiness electives	

Winter

BA, BUSL, CSB, QBA, or ECON	4
Business or nonbusiness electives	

Spring

Business or nonbusiness electives	
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*The outlined courses are intended to act as a guide — not as a required sequence. For example, some freshmen should not take MATH 163A first quarter but should instead enroll in MATH 113 or another math course more basic than 163A. A factor influencing this decision is the math proficiency of the individual student. Decisions throughout the four year program can best be reached by students consulting a faculty advisor for guidance.

**A minimum of 77 hours of nonbusiness courses is required including six hours of humanities, six hours in natural science, six hours in social science, and the required ten hours of mathematics included in the core courses.

Health Care Management Major

(Major code #6118)

Effective management is increasingly important to today's society because the complexity of the society breeds more and more institutions and organizations. This is particularly true in the area of health care services. In addition, health care has been one of the nation's most rapidly growing fields of employment. It is anticipated that fairly sizeable growth in the health care labor force will continue due to (1) continuing rising demand for quality health care, (2) the broadening scope of services defined as health care, (3) increasing health insurance coverage and federal and state financing, and (4) the changing nature of the population.

While recognizing the importance of a liberal education, our health care management curriculum is career-oriented. It is designed to prepare men and women for positions of responsibility in hospitals, extended care facilities, governmental or volunteer health agencies, health planning and regulatory agencies, and health insurers.

As important as the courses taught, however, is the faculty teaching the courses. You will work with fully qualified faculty in all of your health services management courses. We do not use graduate teaching assistants.

You will also be expected to work closely with a faculty advisor. Your advisor will help you define a realistic career plan, reviewing your interests, strengths, and weaknesses. As an outgrowth of your career plan an educational program will be developed. We firmly believe that a close working relationship with your faculty advisor is an important factor in ensuring a sound education.

In addition to the bachelor of business administration degree requirements, a student majoring in health services management must complete the 20-hour health care management core plus at least three additional 4-hour electives at the 300 or 400 level.

The health care management core includes:

1. ECON 315—Economics of Health Care
2. BUSL 360—Law of the Health Care Industry
3. MGT 450—Management of Health Care Organizations
4. ACCT 310—Cost Accounting
5. MGT 498—Internship

The internship is arranged in consultation with the major advisor. It involves significant work experience in a health care organization and normally takes place in the summer between a student's junior and senior years. The internship must be arranged one full quarter before the time it is to be taken.

The three elective courses are selected in consultation with the major advisor. These courses are intended to provide additional background in a specialty area and may include nonbusiness as well as business courses. This specialty area prepares you to work in areas like accounting, finance, or human resource management in a health care setting.

Suggested Course Sequence

Freshman

Fall

ECON 102 Prin. of Econ.	4
ENG 151 Fr. Comp.: Wrting. & Rhet.	5
Social science requirement	
Elective (MATH 113 unless math background is strong)	

Winter

ECON 101 Prin.	4
MATH 163A Calculus	5
INCO 103 Pub. Spkng.	4
Humanities requirement	

Spring

MATH 250B Finite	5
Natural science requirement	
Elective	
Elective	

Sophomore

Fall

ACCT 201 Financial Acct.	4
CSB 200 Intro. Bus. Computers	4
Humanities requirement	
Elective	

Winter

ACCT 202 Managerial Acct.	4
QBA 201 Bus. Stat.	4
Natural science requirement	
Elective	

Spring

BUSL 255 Law & Society	4
Social science requirement	
Elective	

Junior

Fall

MGT 325J Comm. Behavior in Mod. Organization	4
FIN 325 Managerial Finance	4
ECON 305 Managerial Econ.	4
MGT 300 Management	4

Winter

BA 310 Production Mgt.	4
ECON 315 Econ. of Health Care	4
BUSL 360 Law of Health Care Industry	4
Health management elective	

Spring

ACCT 310 Cost Acct.	4
MKT 301 Mkt. Prin.	4
MGT 450 Mgt. of Health Care	4
Elective	

Senior

Fall

Major health management elective	4
Elective	
Elective	
Elective	

Winter

Major health management elective	4
Elective	
Elective	
Elective	

Spring

BA 470 Administrative Policy	4
Elective	
Elective	
Elective	

In addition, the internship can be taken during the summer period or during the mid-year break, or during a quarter if arrangements can be made.

Human Resource Management Major

(Major code #6130)

The demand for students with training in the area of human resource management is increasing quite substantially. The U.S. Department of Labor predicts that professional employment in human resource management will grow 168 percent faster than other professional fields between 1980 and 1985. This means that approximately 21,000 new human resource management jobs will be available every year.

The Human Resource Management (HRM) major is designed to provide an educational background for students

with a career interest in the personnel function and/or labor relations in both private and public sector organizations. Specifically, the major is designed to provide a basic preparation for entry-level positions in human resource management and provide an educational background which supports career advancement in this area.

In addition to the B.B.A. requirements, a student majoring in human resource management must complete the following courses: BUSL 356 (Law of the Management Process), HRM 420 (Administration of Personnel), HRM 425 (Labor Relations), MGT 340 (Organizational Behavior-Micro Perspective), HRM 430 (Personnel Management Problems), HRM 450 (Recruitment, Selection, and Appraisal), HRM 440 (Organizational Behavior-Managing Change), and HRM 460 (Manpower Management).

Majors are also expected to select, with the help of their advisors, electives relevant to their career preparation. A sample of recommended electives follows: ACCT 310 (Cost Accounting), ANTH 270 (Basic Concepts of Anthropology), AAS 201 (History of the Black Worker), ECON 320 (Labor Economics), ECON 321 (Labor Legislation), ISE 422 (Seminar in Occupational Safety and Health), INCO 404 (Principles and Techniques of Interviewing), PSY 101 (General Psychology), PSY 241 (Behavioral Measurement), PSY 261 (Industrial Psychology), PSY 275 (Educational Psychology), PSY 336 (Social Psychology), and SOC 101 (Introduction to Sociology).

Your advisor will help you define a realistic career plan, reviewing your interests, strengths, and weaknesses. As an outgrowth of your career plan an educational program will be developed. We firmly believe that a close working relationship with your faculty advisor is an important factor in ensuring a sound education.

You may want to join the Ohio University Student Personnel Association, a chapter of the American Society for Personnel Administration. Presentations by personnel and industrial relations managers and field trips bring the members in contact with human resource managers and serve to complement formal classroom studies.

Suggested Course Sequence

Freshman

Fall

ECON 102 Prin. of Econ.	4
ENG 151 Fr. Comp.: Wrting. & Rhet.	5
Social science requirement	
Elective (MATH 113 unless strong math background)	

Winter

ECON 101 Prin. of Econ.	4
MATH 163A Intro. to Calculus	5
INCO 103 Pub. Spkng.	4
Humanities requirement	

Spring

MATH 250B Finite	5
Natural science requirement	
Elective	
Elective	

Sophomore

Fall

ACCT 201 Financial Acct.	4
CSB 200 Intro. to Bus. Computers	4
Humanities requirement	
Elective	

Winter

ACCT 202 Managerial Acct.	4
QBA 201 Intro. to Bus. Stat.	4
Natural science requirement	
Elective	

<i>Spring</i>	
BUSL 255 Law & Society	4
Social science requirement	
Electives	

Junior

<i>Fall</i>	
MGT 300 Management	4
MGT 325J Comm. Behavior in Mod. Org.	4
ECON 305 Managerial Econ.	4
BUSL 356 Law of Mgt. Process	4

<i>Winter</i>	
HRM 420 Admin. of Personnel	4
FIN 325 Managerial Finance	4
BA 310 Production Mgt.	4
MGT 340 Organizational Behavior-Micro	4

<i>Spring</i>	
HRM 440 Org. Beh.-Managing Change	4
MKT 301 Marketing Principles	4
HRM 425 Labor Relations	4
Elective	

Senior

<i>Fall</i>	
HRM 430 Personnel Mgt. Problems	4
HRM 450 Recruitment, Selection & Appraisal	4
Elective	
Elective	

<i>Winter</i>	
HRM 460 Manpower Mgt.	4
Elective	
Elective	
Elective	

<i>Spring</i>	
BA 470 Admin. Policy	4
Elective	
Elective	
Elective	

International Business Major

(Major code #6132)

Students majoring in international business must complete the requirements for the international business major in conjunction with the requirements for a major in either accounting, finance, management, marketing, or production management. A total of 24 credit hours should be earned by combining courses from the following: (a) one 4-credit course from Tier II Third World Cultures or a modern language course at the intermediate level (211), (b) ECON 340 (International Economics) or ECON 341 (International Monetary Systems), (c) MKT 441 (International Marketing), (d) FIN 455 (International Finance), (e) MKT 484 (International Comparative Management), (f) BA 485 (Multinational Business) or MGT 497 or BA 497 or FIN 497.

Suggested Course Sequence*

Freshman

<i>Fall</i>	
ECON 101 Prin. of Micro.	4
MATH 163A Intro. to Calculus	5
Nonbusiness electives **	7

<i>Winter</i>	
ECON 102 Prin. of Macro.	4
INCO 103 Public Speaking	4
Nonbusiness electives **	8

<i>Spring</i>	
Nonbusiness electives **	16

Sophomore

<i>Fall</i>	
ACCT 201 Financial Acct.	4
CSB 200 Intro. to Bus. Computers	4
MATH 250B Finite	5
Nonbusiness electives**	3

<i>Winter</i>	
ACCT 202 Managerial Acct.	4
QBA 201 Intro. to Bus. Stat.	4
Nonbusiness electives**	8

<i>Spring</i>	
BUSL 255 Law & Society	4
Third World cultures or modern language	4
Nonbusiness electives**	8

Junior

<i>Fall</i>	
BA 310 Prod. Mgt.	4
ECON 305 Managerial Econ.	4
Business or nonbusiness electives	8

<i>Winter</i>	
FIN 325 Managerial Finance	4
MGT 300 Management	4
Business or nonbusiness electives	8

<i>Spring</i>	
MGT 325J Comm. Behavior in Mod. Org.	4
MKT 301 Prin. of Marketing	4
Business or nonbusiness electives	8

Senior

<i>Fall</i>	
BA 470 Administrative Policy	4
ECON 341 International Monetary Sys.	4
Business or nonbusiness electives	8

<i>Winter</i>	
FIN 455 International Finance	4
MGT 484 International Comparative Mgt.	4
Business or nonbusiness electives	8

<i>Spring</i>	
BA 485 Multinational Business	4
MKT 441 International Marketing	4
Business or nonbusiness electives	8

*The outlined courses are intended to act as a guide—not as a required sequence. For example, some freshmen should not take MATH 163A first quarter, but should instead enroll in MATH 113 or another math course more basic than 163A. A factor influencing this decision is the math proficiency of the individual student. Decisions throughout the four-year program can best be reached by students consulting a faculty advisor for guidance.

**A minimum of 77 hours of nonbusiness courses is required including six hours of humanities, six hours in natural science, six hours in social science, four hours of public speaking, four hours of Third World cultures or modern language, and the required ten hours of mathematics.

Management Major

(Major code #6126)

Effective management is increasingly important in today's society because the complexity of the society breeds more and more institutions and organizations. Managing is an important activity in each of these. Thus there is, and will continue to be, a strong demand for effective managers to plan activities, to provide direction, and to work effectively with other people to ensure that organizational goals are accomplished.

The management major curriculum is designed to provide an educational base for supervisors, executives, and administrators in business, government, and other institutions. In addition to the B.B.A. degree requirements, a student majoring in management must complete INCO 103 (Public Speaking), BUSL 356 (Law of Management Process), MGT 340 (Organizational Behavior-Micro Per-

spective), MGT 345 (Organizational Behavior-Macro Perspective), HRM 420 (Administration of Personnel), MGT 430 (Management Systems: Decision-Making), MGT 435 (Management Systems: Information Handling), and one 400-level elective course in either management, human resource management, or business administration selected in consultation with a faculty advisor.

Since managers function in different types of institutions and manage different types of operations, it is strongly recommended that all management majors select a supporting field of study. The supporting field should be selected to provide a strong base for the student's career development. Students normally select, in consultation with their advisors, three to five courses in the supporting field. Recommended courses for the following supporting fields are available in the department chairman's office: manufacturing management, public administration, retail management, natural resource management, and international management. In addition, students may, in consultation with their advisors, tailor their own supporting fields to meet their own unique career goals.

A student majoring in management will be assigned an advisor who will work with the student to help define career goals based upon student interests, review strengths and weaknesses, and recommend relevant elective courses. Students are expected to meet with their advisors at least once each quarter.

Suggested Course Sequence

Freshman

Fall

ECON 102 Prin. of Econ.	4
ENG 151 Fr. Comp.: Wrng. & Rh.	5
Social science requirement	
Elective (MATH 113 unless strong math background)	

Winter

ECON 101 Prin. of Econ.	4
MATH 163A Intro. to Calculus	5
INCO 103 Pub. Spkng.	4
Humanities requirement	

Spring

MATH 250B Finite	5
Natural science requirement	
Elective	
Elective	

Sophomore

Fall

ACCT 201 Financial Acct.	4
CSB 200 Intro. to Bus. Computers	4
Humanities requirement	
Elective	

Winter

ACCT 202 Managerial Acct.	4
QBA 201 Intro. to Bus. Stat.	4
Natural science requirement	
Elective	

Spring

BUSL 225 Law & Society	4
Social science requirement	
Electives	

Junior

Fall

MGT 300 Management	4
MGT 325J Comm. Behavior in Mod. Org.	4
ECON 305 Managerial Econ.	4
BUSL 356 Law of Mgt. Proc.	4

Winter

MGT 340 Organizational Behavior-Micro	4
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FIN 325 Managerial Fin.	4
BA 310 Production Mgt.	4
Elective	

Spring

MGT 345 Organizational Behavior-Macro	4
MKT 301 Marketing Prin.	4
Elective	
Elective	

Senior

Fall

HRM 420 Adm. of Personnel	4
MGT 430 Mgt. Systems: Decision-Making	4
Supporting field elective	4
Elective	

Winter

MGT 435 Mgt. Systems: Info. Handling	4
Supporting field elective	4
Elective	
Elective	

Spring

Management major elective	4
BA 470 Admin. Policy	4
Supporting field elective	4
Elective	

Marketing Major

(Major code #6127)

Marketing is the lifeline of any organization. It links the organization with its customers. Not only vital to the maintenance of the survival of the organization, the marketing function is essential to the maintenance of the free enterprise system. The marketing curriculum is designed to give the student both a broad knowledge and an opportunity to specialize in any area of the student's choice. The marketing major prepares students to become professional marketing personnel via available coursework in sales management, marketing research and consumer behavior, and marketing analysis and management (national as well as international).

Typically, upon graduation, the marketing major obtains direct entry positions in such areas as sales, sales management, promotion, public relations, and advertising, with companies which specialize in analysis and description of the consumer and his or her attitudes and behaviors.

In addition to the B.B.A. core requirements, a student majoring in marketing must complete 24 hours of marketing courses at the 300-400 level including 463.

Suggested Course Sequence*

Freshman

Fall

ECON 101 Prin. of Econ.	4
MATH 163A Intro. to Calculus	5
PSY 101 Gen. Psych.	5
Nonbusiness electives**	

Winter

ECON 102 Prin. of Econ.	4
MATH 250B Finite	5
Nonbusiness electives	

Spring

INCO 103	4
Nonbusiness electives	

Sophomore

Fall

ACCT 201 Financial Acct.	4
CSB 200 Intro. to Bus. Computers	4
Nonbusiness electives	

<i>Winter</i>	
ACCT 202 Managerial Acct.	4
QBA 201 Intro. to Bus. Stat.	4
Nonbusiness electives	

<i>Spring</i>	
BUSL 255 Law & Society	4
Nonbusiness electives	
Electives	

Junior

<i>Fall</i>	
BA 310 Production Mgt.	4
MKT 301 Prin. of Mkt.	4
ECON 305 Managerial Econ.	4
Elective	4

<i>Winter</i>	
MKT 479 Marketing Research	4
FIN 325 Managerial Fin.	4
MGT 300 Mgt.	4
MKT 404 Mgt. of Distribution	4

<i>Spring</i>	
MGT 325J Comm. Behavior in Mod. Organ.	4
MKT 458 Sales Mgt.	4
MKT 444 Consumer Behavior	4
MKT 450 Management of Promotion	4

Senior

<i>Fall</i>	
BA 470 Administrative Policy	4
MKT 463 Mkt. Strategy	4
MKT 491 Seminar	4
Business or nonbusiness electives	

<i>Winter</i>	
Business or nonbusiness electives	

<i>Spring</i>	
Business or nonbusiness electives	

*The outlined courses are intended to act as a guide — not as a required sequence. For example, some freshmen should not take MATH 163A first quarter but should instead enroll in MATH 113 or another math course more basic than 163A. A factor influencing this decision is the math proficiency of the individual student. Decisions throughout the four-year program can best be reached by students consulting a faculty advisor for guidance.

**A minimum of 77 hours of nonbusiness courses is required including — six hours in humanities, six hours in natural science, six hours in social science, and the required ten hours of mathematics included in the core courses.

Production Management Major

(Major code #6119)

The program in production management is primarily concerned with the effective management of the physical and human resources of an organization. By partaking in a study of an interdisciplinary curriculum, the student obtains a basic understanding of how to effectively manage facilities, equipment, and personnel, and their interactions in a variety of activities such as manufacturing/assembly, transportation, warehousing, research, or assembly-line operations.

The production management major is often called upon to design, construct, and operate elements in the input-transformation-output process/system. Those majoring in this program can expect to find career opportunities either in a supervisory capacity in an actual production operation or in one of the many staff assignments in manufacturing, such as methods and standards, evaluation of job content and design, production and inventory control, quality control, or in related fields such as purchasing, subcontracting, and industrial marketing.

Suggested Course Sequence*

Freshman

<i>Fall</i>	
ECON 101 Prin. of Econ.	4
MATH 163A Intro. to Calculus	5
Nonbusiness electives**	

<i>Winter</i>	
ECON 102 Prin. of Econ.	4
MATH 250B Finite	5
Nonbusiness electives	

<i>Spring</i>	
INCO 103	4
Nonbusiness electives	

Sophomore

<i>Fall</i>	
ACCT 201 Financial Acct.	4
CSB 200 Intro. to Bus. Computers	4
Nonbusiness electives	

<i>Winter</i>	
ACCT 202 Managerial Acct.	4
QBA 201 Intro. to Bus. Stat.	4
Nonbusiness electives	

<i>Spring</i>	
BUSL 255 Law & Society	4
Nonbusiness electives	

Junior

<i>Fall</i>	
BA 310 Prod. Mgt.	4
ECON 305 Managerial Econ.	4
Business or nonbusiness electives	

<i>Winter</i>	
FIN 325 Managerial Fin.	4
MGT 300 Mgt.	4
Business or nonbusiness electives	

<i>Spring</i>	
MGT 325J Comm. Behavior in Mod. Organization	4
MKT 301 Prin. of Mkt.	4
ACCT 310 Cost Acct.	4
Business or nonbusiness electives	

Senior

<i>Fall</i>	
ISE 333 Work Design	4
HRM 425 Labor Relations	4
BA 411 Prod. Planning & Control	4
OR	
ISE 432 Inventory & Mfg. Control I	3
Business or nonbusiness electives	

<i>Winter</i>	
ISE 440A Industrial Plant Design	2
QBA 401 Operations Research	4
MGT 440 Organizational Behavior: Ldrshp. & Motiv.	4
Business or nonbusiness electives	

<i>Spring</i>	
ISE 440B Industrial Plant Design	3
BA 470 Admin. Policy	4
BA 412 Prod. Mgt. Prob.	4
Business or nonbusiness electives	

*The outlined courses are intended to act as a guide — not as a required sequence. For example, some freshmen should not take MATH 163A first quarter but should instead enroll in MATH 113 or another math course more basic than 163A. A factor influencing this decision is the math proficiency of the individual student. Decisions throughout the four-year program can best be reached by students consulting a faculty advisor for guidance.

**A minimum of 77 hours of nonbusiness courses is required including — six hours in humanities, six hours in natural science, six hours in social science, and the required ten hours of mathematics included in the core courses.

Quantitative Business Analysis Major

(Major code #6128)

The undergraduate major in quantitative business analysis is designed primarily to prepare students for careers as analysts in a variety of functionally oriented positions in industry or government. Knowledge of quantitative techniques and how and when to use them is becoming increasingly important in today's business world. Students majoring in quantitative business analysis (QBA) also gain the basic knowledge of quantitative methods and techniques that are necessary for graduate work in statistics or operations research.

Students choosing this major are encouraged to obtain some depth of knowledge in some functional area of application within the college (beyond the core courses in that area) to complement their study of quantitative business analysis.

Graduates of the programs in quantitative business analysis have obtained jobs as statistical analysts (in quality control, marketing research, or financial research) and in operations research (internal operations research groups, public accounting firms' management advisory services, or management consulting firms).

In addition to the core curriculum for all candidates for the bachelor's degree in the College of Business Administration, a major in quantitative business analysis consists of a minimum of 20 credit hours of 300- or 400-level QBA courses, with at least four credit hours in each of the following areas: (1) statistics and (2) operations research. CSB 420 (FORTRAN) or CS 220 or equivalent is also required for a total of 24 required hours.

Suggested Course Sequences

The first two years would be approximately the same for any sequence.

Freshman	
MATH 163A, 250B	10
ECON 101, 102	8
English and humanities	8
Social science	8
INCO 103	4
Non CBA electives*	10
	48

Sophomore	
ACCT 201 & 202	8
CSB 200 & QBA 201	8
BUSL 255	4
Natural science	8
Non CBA electives*	20
	48

*To meet requirements of 40 percent of work outside the College of Business Administration (CBA) including two courses in math, two courses in natural sciences, two courses in humanities, and two courses in social sciences.

Two possible areas of emphasis in quantitative business analysis and courses (all are four-quarter-hour courses) suggested for those areas are:

Statistics

Junior	
QBA 454 Interm. Probability Theory (fall)	4
QBA 455 Statistical Inference (winter)	4
QBA 445 Forecasting or other QBA elective (spring)	4
Senior	
QBA 401 Operations Research (fall)	4
CSB 420 FORTRAN Programming or CS 220 (winter)	4
QBA 438 Nonparametric Stat. or other QBA elective (spring)	4

Operations Research

Junior	
QBA 401 Operations Research (fall)	4
CSB 420 FORTRAN Programming or CS 220 (winter)	4
QBA 485 Simulation (spring)	4

Senior	
QBA 454 Interm. Probability Theory (fall)	4
QBA 455 Statistical Inference (winter)	4
QBA 491 Mgt. Science Seminar (spring)	3, 4 or 5

For further information concerning the majors listed, please contact the Office of Management Systems, Cope-land Hall 107, Ohio University, Athens, Ohio 45701-2979; telephone 614/594-5165.

PREPARATION FOR LAW SCHOOL

A student in the College of Business Administration who plans to enter law school should follow the bachelor of business administration degree curriculum and also elect, with the approval of his or her advisor, courses in other fields, especially American government, American and English history, English, philosophy, interpersonal communication, and additional theory courses in the College of Arts and Sciences, except those which substantially duplicate material found in the typical law school curriculum.

The Ohio Supreme Court in its regulations governing the admission to the practice of law in Ohio provides that a student entering law school must be able to show possession of an undergraduate degree from an approved college if he or she wishes to take the Ohio Bar Examination. However, the Ohio Supreme Court provides for one possible exception to the preceding regulation — if a person has earned, subsequent to graduation from law school, a bachelor's degree through completion of courses and credits other than those received in law school, and has made a record of academic achievement which is satisfactory to the Ohio Supreme Court, such a person may, in the court's decision, be permitted to apply for admission to the practice of law in Ohio. Law schools in the state of Ohio have supplemented this Supreme Court rule by requiring an undergraduate degree of all entering students, regardless of the state in which they plan to take the bar examination.

For the benefit of those students who *do not* plan to take the Ohio Bar Examination and who *do not* plan to seek admission to an Ohio law school, a degree *in absentia* program is available as described below.

A student who desires to (A) enter at the end of three years of college work a school of law located outside Ohio and (B) receive the bachelor of business administration degree from Ohio University after completing the first year in law school may do so provided the following conditions are met: the student has the written approval of the dean of the College of Business Administration; a minimum of 144 quarter hours, including the required courses in the bachelor of business administration degree curriculum (BUSL 255 excluded), are completed with a point-hour ratio of 2.0 on all hours attempted; a full year's work in an accredited law school is completed with an average equivalent to that prescribed for the bachelor's degree at Ohio University; and the student is eligible for advancement without condition to the second year.

If there is any possibility that a student might wish to take the Ohio Bar Examination, he or she is urged to obtain the undergraduate degree before entering the law school.

CENTER FOR BUSINESS ENTERPRISES

The Center for Business Enterprises was established to provide advisory services to small businesses in southeast Ohio. It also aims to provide a learning opportunity for students and faculty who participate in case studies that assist small businesses. As a by-product of this dialogue between students, teachers, and practitioners, further research projects are encouraged and facilitated. Special courses to meet the identified needs of operators of small

business may be arranged through the University's Office of Lifelong Learning. The center is financed through grants and contract funds. Any student or faculty member of Ohio University who has the interest and appropriate preparation or skills may participate.

For further information, please contact Dr. Dwight Pugh, Director, Copeland Hall 418, Ohio University, Athens, Ohio 45701-2979; telephone 614/594-5992 or 614/594-6682.

College of Communication

Paul E. Nelson, *Dean*

Roderick D. Rightmire, *Associate Dean*

Thomas Dunlap, *Assistant Dean*

The College of Communication includes the School of Interpersonal Communication, the E.W. Scripps School of Journalism, the School of Telecommunications, the Institute of Visual Communication, and the Center for Communication Management.

The college was created to meet more fully the communication needs of a changing society. New forms of communication, the growth of communication systems, and the need for better communication among peoples, races, economic groups, and nations generally were all factors in a decision that Ohio University should move on a broad and substantial basis to prepare graduates both for traditional roles and for a variety of responsibilities not previously acknowledged.

The college is equipped to train graduates for professional careers in journalism, in telecommunications, in voice and data communication, in visual communications, and in organizational and interpersonal communication. The college operates on the assumption that professional competency in these areas calls for the highest possible proficiency in the field of specialization, plus the broadest possible liberal education in other disciplines.

In journalism, a fully accredited school offers course work in advertising, magazine journalism, news writing and editing, public relations, radio-television news, and foreign correspondence.

The journalism school is one of the largest in the country and each year graduates more than 200 seniors who move into professional careers on leading newspapers, magazines, and news-gathering organizations, as well as into advertising and public relations positions. Careers take them to all parts of the world.

The School of Telecommunications trains professionals for work in telecommunications generally, with specialized careers in station and network management, audio and video production, and programming.

Students work in the University cable channel and broadcast services at radio station WOUB and the University television station, WOUB-TV, for actual hands-on experience.

The School of Interpersonal Communication offers courses in public speaking, debate and discussion, small group and organizational communication, persuasion, rhetoric, the history of public address, etc. An intercollegiate forensics program is open to all interested students.

The Institute of Visual Communication prepares students for careers in picture editing, photo communication, photo illustration, advertising photography, multi-media, educational media, theater communication, medical

communication, and electronic visual communication.

Students graduating from the program pursue careers in newspapers, magazines, theater companies, educational institutions, the medical field, motion picture production, and free-lance photography.

The Center for Communication Management is a new four-year baccalaureate program which offers a degree in communication management. Its primary focus is to develop interdisciplinary professional communication managers. Coursework is designed to equip students with specific preprofessional competence in the areas of voice and data communication.

All programs of study at the undergraduate level lead to the bachelor's degree. More detailed descriptions and the requirements for the various majors offered in the schools are given in the pages immediately following.

Graduate programs leading to the M.A., M.S., and Ph.D. degrees are available in interpersonal communication, journalism, and telecommunications. These are described in detail in the graduate catalog.

Admission Requirements

Freshman admission to the College of Communication's School of Interpersonal Communication, E.W. Scripps School of Journalism, School of Telecommunications, Institute of Visual Communication, and Center for Communication Management is based on the following:

1. Students who rank in the top half of their high school graduating classes will be admitted directly to an academic unit within the College of Communication.
2. Students who achieve 1000 total SAT or 22 composite ACT score or above will be admitted directly to an academic unit within the College of Communication.
3. Students who do not meet the above criteria may supplement their applications to the college with letters of recommendation and descriptions of high school or professional activities. Students are encouraged to visit campus, talk to faculty, and provide evidence of their interest in admission to the college. The College of Communication will make final admission decisions based upon criteria which will include:
 - a. special consideration for under-represented students;
 - b. high school class standing;
 - c. SAT/ACT scores;
 - d. communication-related experience;

- e. letters of recommendation;
 - f. recommendations from Ohio University personnel following campus visit;
 - g. special circumstances submitted in writing.
4. Students who do not initially meet college requirements for direct admission into the College of Communication may work toward meeting admission requirements by enrolling in a University College program jointly administered by University College and the College of Communication. Students working toward admission will receive advice and information necessary for transfer into an academic unit in the College of Communication upon their becoming eligible.

Transfer Policy

All students accepted by transfer into the College of Communication, whether transferring from other universities or from other programs within Ohio University, must, beginning with fall quarter, 1982, have a grade-point average of 2.5 or higher, have earned at least 48 quarter hours (32 semester hours), and have completed the Tier I quantitative skills and freshman composition requirements. This regulation also applies to students who are transferring from one program to another within the College of Communication.

If special circumstances exist, the director of the program to which the student is applying will consider written proposals from students not meeting all three of these criteria. In such individual reviews, factors to be considered will be (1) special allowances for students otherwise underrepresented in the unit to which application is made, (2) communication-related experience, (3) letters of recommendation, (4) academic achievement in courses closely related to the study of communication, and (5) other circumstances if submitted in writing and judged to be appropriate. If the director and/or a designated committee recommends admission to the program, students will be notified of the decision in writing.

Degrees and Requirements

The College of Communication offers curricula leading to the degrees of bachelor of science in communication (interpersonal communication, telecommunications, communication management) and bachelor of science in journalism (journalism and visual communication).

Each candidate for a degree in the College of Communication must satisfy the requirements established by the program in which he or she is enrolled. In addition to unit requirements for completion of the bachelor's degree, a student must check with the proposed program for entrance requirements which are separate from admission to the college. Those requirements are specified on the following pages.

Additionally, students are required to meet the General Education requirements which have been established by Ohio University. Most University General Education courses, however, can be used to satisfy both program and University requirements. Consult with your advisor on the dual use of those courses.

The student must also have a minimum total of 192 earned hours with a 2.0 (C) average in all hours attempted in the program. Only the final hours earned when courses are repeated count toward graduation.

The minimum residency requirement for a student receiving a bachelor's degree from the College of Communication shall be the final year (three quarters) or the final 48 hours of credit. In certain cases exceptions may be made by the academic dean in consultation with the director of the school which the student plans to enter.

Advising

A student entering the College of Communication is assigned an advisor by the school which he or she plans to enter. Advisors will be assigned on the basis of student interest. Faculty advisors assist in the preparation of a schedule each quarter so that the proper sequence of courses in the major and appropriately related courses is selected. *The student, however, is responsible for seeing that all requirements for the degree are being met.*

Scholarships

Scholarships sponsored by the five divisions within the College of Communication for qualified undergraduate students are available on an annual basis. Inquiries on the scholarship program should be directed to the scholarship chairman of the student's intended area of study.

SCHOOL OF INTERPERSONAL COMMUNICATION

Lynn Alan Phelps, *Director*

The School of Interpersonal Communication offers a general, liberal education, emphasizing the scientific and artistic basis of communication. Students in three undergraduate majors study group communication and public address; communication theory and process; organizational communication as applied to business, industrial, and educational institutions; and speech communication in the secondary schools.

Specific major programs are developed to meet the needs of each student. A combination of areas and specific courses can lead to professional or preprofessional competence in such fields as teaching, foreign service, law, politics and government, theology, public relations, labor-management relations, personnel, campaign and propaganda administration, and poll and survey management. The School of Interpersonal Communication places qualified undergraduate and graduate majors in trainee or internship programs on a credit or noncredit basis as suitable opportunities arise.

Through its forensics program, interpersonal communication provides the opportunity for all students to meet outstanding undergraduates from 300 or more colleges and universities in intellectual competition. Thirty tournaments at other schools and three held on campus enable students to develop skills in debate, extemporaneous speaking, oratory, discussion, and oral interpretation. Excellence in scholarship and superior performance in speech communication are rewarded in several ways. Delta Sigma Rho-Tau Kappa Alpha national honorary is open to students in the upper third of their class who excel in forensics. The Lorin C. Staats Award is given to the outstanding senior who has participated with distinction in several forensics areas. The outstanding junior or senior debater receives the Francis McVicker Maxwell Award.

Cross Disciplinary Center for Studies of Culture

The center houses the original works of Jean Gebser and other cultural theorists. It provides the opportunity for a phenomenological approach to the study of communication and culture. It is open to all students, particularly

those in philosophy, rhetoric, and communication. Conferences are planned by center personnel for intensive research into the relationships between culture and communication.

Center for Communication Studies

The purpose of the center is to generate and disseminate research reports by the communication faculty. These research reports are made available to scholars and colleagues in the communication discipline throughout the country.

Preparation for Law School

The Association of American Law Schools states that the goals of prelegal education are: (1) comprehension and expression in words, (2) critical understanding of the human institutions and values with which the law deals, and (3) creative powers in thinking. In addition, all Ohio law schools require an undergraduate degree from an approved institution before admission. A student in the School of Interpersonal Communication who plans to enter law or paralegal school will find these goals well represented.

The prelaw student in interpersonal communication will be individually counseled and advised in developing a course of study to meet the intellectual challenges of the legal profession. Suggested courses include: communication theory and practice, argumentation, legal communication, English composition and literature, history, political science, business law, behavioral sciences, humanities, comparative arts, economics, and philosophy. Few specific courses are required so that the exact course of study can be tailored to the professional career interests of the individual student.

However, each prelaw student must meet the requirements of one of the three interpersonal communications majors in order to complete the required bachelor of science degree.

General Requirements for All InCo Majors

1. INCO 101 and INCO 103
2. Five hours of English selected from the following courses: 151, 152, 153, 153A, or 153B.
3. *Organizational Communication Majors*
ENG 305 or MGT 325
Tier II requirements
(see recommended clusters)
4. *General Communication Majors*
Tier II requirements
(see recommended clusters)
5. *General Speech with Certification Majors*
Forty-five hours of general education distributed to include at least two courses in each of the following fields:
Science and mathematics (one course in each)
Comparative arts and/or philosophy
Social science (PSY 101 required and can be counted as one of two courses)
English and/or foreign language (INCO 103 required)

Major in General Communication

(Major code #5302)

Maximum freedom of choice in course selection is the primary feature of this major. Its aim is development of a broadly trained student in the liberal arts - humanistic aspects of interpersonal communication. Majors may

prepare for careers in law, industry, theology, higher education, etc.

1. Required courses: 29 hours

Four courses are specifically required:

- INCO 101 Fundamentals of Speech
- INCO 103 Public Speaking
- INCO 107 Introduction to Language Behavior
- INCO 205 Techniques of Group Discussion
- INCO 215 Argumentation and Debate
- INCO 220 Oral Interpretation
- INCO 234 Introduction to Communication Theory
- INCO 450 Introduction to Rhetorical Theory

2. Additional major courses: 11 hours

Student must select at least three hours in *each* of the following areas:

- | | |
|---------------------|----------------------|
| Public Address | Communication Theory |
| INCO 353A,B,C, or D | INCO 433 |
| INCO 212 | INCO 446 |
| INCO 342 | INCO 452 |
| INCO 458 | |
| | Group Process |
| | INCO 210 |
| | INCO 245 |
| | INCO 404 |
| | INCO 405 |

3. Students must take a concentration of at least 20 hours in one department other than InCo. Interdisciplinary concentrations may be used to meet this requirement with approval of the student's advisor and the director of the school.

4. General electives as necessary to complete minimum University requirement of 192 quarter hours for graduation.

Major in General Speech with Certification

(Major code #5303)

This major provides a program for students interested in high school teaching. The emphasis stresses a liberal arts education as related to interpersonal communication and professional preparation for state teaching certification.

This major provides two program options to students enrolled in the School of Interpersonal Communication: a communication comprehensive emphasis (90 quarter hours) or a speech emphasis (60 quarter hours). The comprehensive communication program will certify a student to teach speech, journalism, reading, and English, or any combination thereof, in high school. The other program will certify in speech only. For details of these programs, see the *College of Education* section of this catalog, or contact Director's Office, School of Interpersonal Communication, Kantner Hall.

Major in Organizational Communication

(Major code #5301)

This major provides a challenging program of study across the broad spectrum of human communicative behavior, emphasizing both theoretical bases and practical applications. It is designed for those students aiming for professional careers and administrative positions in business, educational, governmental, industrial, labor, or other organizational units.

1. Major Course Requirements

- | | |
|---|---|
| INCO 101 Fundamentals of Speech | 3 |
| INCO 103 Public Speaking | 4 |
| INCO 107 Introduction to Language Behavior | 4 |
| INCO 205 Group Discussion | 4 |
| INCO 206 Communication in Interpersonal Relationships | 4 |
| INCO 210 Parliamentary Procedure | 2 |
| INCO 234 Intro. to Communications Theory | 5 |
| INCO 245 Intro. to Organizational Comm. | 4 |
| INCO 301 Empirical Research | 5 |

- INCO 342 Communication and Persuasion 4
 INCO 404 Prin. & Tech. of Interviewing 4
 INCO 405 Principles of Conference Leadership 4
 INCO 445 Practicum 5
 INCO 446 Communication and the Campaign 5
 INCO Electives (10 hours minimum)
2. Related Courses and Proficiency Requirements
 Completion of two related areas (minimum of 28 hours in each with at least 15 hours from courses numbered 200 or above) from single discipline or interdisciplinary studies such as:
- Behavioral Sciences
 - Comparative Arts
 - Government and Political Science
 - Humanities
 - Personnel Management and Administration
- Courses used in related areas must be approved by the student's advisor.
3. General electives as necessary to complete minimum University requirement of 192 quarter hours for graduation.

E.W. SCRIPPS SCHOOL OF JOURNALISM

Cortland Anderson, *Director*
 Thomas Peters, *Associate Director*

BACHELOR OF SCIENCE IN JOURNALISM

The Ohio University E.W. Scripps School of Journalism is accredited by the American Council on Education for Journalism. It is one of a limited number of accredited schools and departments of journalism in the United States. It is one of the members of the American Association of Schools and Departments of Journalism.

No school in the country offers more accredited sequences than the E. W. Scripps School of Journalism.

Purposes and Objectives

The purposes of the Ohio University E.W. Scripps School of Journalism are (1) to provide thorough, broadly based *professional* education and training in journalism and communications, leading to the B.S.J. and advanced degrees; (2) to provide *liberal* and *cultural* background in the arts, literature, languages, and social and natural sciences; (3) to promote scholarly research and achievements by the faculty and students; (4) to provide leadership and assistance to high school journalism and to professional associations on state, national, and international levels; and (5) to set high standards of journalism ethics.

Journalism today is a profession — like medicine, law, teaching, or engineering. It requires its practitioners to be culturally educated and professionally trained. Blending the liberal arts with professional courses, Ohio University journalism students take approximately three-fourths of their courses outside the professional school.

Six sequences are offered, all leading to the bachelor of science in journalism degree: advertising, magazine journalism, news writing and editing, public relations, broadcast news, and visual communication.

While working toward their degrees, students may serve on the staff of *The Athens Messenger*, an independently owned daily newspaper. The city editor, managing editor, sports editor, and women's editor are faculty members of the E.W. Scripps School of Journalism. The student staff

members of *The Athens Messenger* gather and write news, edit local and Associated Press copy, write headlines, and prepare copy and layouts. This training prepares students to take and hold jobs immediately after graduation.

Practical experience is also available on a laboratory magazine, *Athens*, and in graphics and advertising laboratories. Many students add to their experience by helping edit *The Post*, daily campus newspaper, or the *Spectrum Green*, University yearbook.

In broadcast news, students get practical experience in preparing and broadcasting news over the University's radio and television stations, and the local cable television system.

Internship Program.

Consistent with its policy of combining classwork with practical training, the E.W. Scripps School of Journalism has a journalism internship program. Juniors or seniors are eligible for appointment as interns. Many of these internships are developed by the student. The period of internship is ten weeks. The intern is provided with as varied experience in practical journalism as possible and is paid a moderate sum for his or her work and study. No credit will be granted for internship work itself.

Curricula and Requirements

The American Council on Education for Journalism includes among its accrediting standards the following provision:

Generally, three-fourths of the student's program should consist of courses in the liberal arts and sciences and one-fourth in professional courses in journalism.

Journalism students at Ohio University meet the above provision largely by fulfilling two sets of requirements: general and specialization area requirements. The first of these provides for a liberal arts and sciences core for all students, as follows:

Political Science (2 qtrs)
 Sociology and/or Anthropology (2 qtrs)
 Economics (2 qtrs)
 Psychology (1 qtr) (except PSY 121)
 History (2 qtrs)
 English (2 qtrs) (one from ENG 305, 307, 308, or 309)
 Statistics (1 qtr) (from approved school list)
 Philosophy (2 qtrs) (one must be PHIL 120 or 320)

Foreign Language (3 qtrs basic sequence or 1 qtr advanced)
 OR
 Science (3 qtrs as approved by advisor)

Comparative Arts/Fine Arts (2 qtrs)
 OR
 Afro-American and/or Women's Studies (2 qtrs)

To this liberal base, which should be the focus of the freshman year, journalism students add courses in a desired area or areas of specialization. This requirement may be filled by completing any one of three options:

1. a minimum of 36 hours in a single department within the College of Arts and Sciences (usually structured in accordance with the major requirements of the selected department),
2. a minimum of 18 approved hours in each of two departments in Arts and Sciences,
3. a minimum of 18 approved hours in one Arts and Sciences department and 18 approved hours in any other series of related courses.

Additional nonjournalism courses are required in some sequences. No course may be counted in more than one type of requirement. For example, a course used to meet a

general requirement may not be applied to a sequence or specialization area requirement as well.

To assure the liberal stress of the overall program, the professional content of the B.S.J. is limited to one-fourth of the 192 hours required for the degree. Credits for all courses in journalism, telecommunications, photography, and visual communication should total at least 45 hours and not more than 55 hours. All professional hours beyond 55 must be compensated for by nonprofessional hours over the required 192-hour total. Nonjournalism courses which are required in sequences are not to be counted as part of the 45-55 total professional hours.

Standards

1. To qualify to take any journalism course, students must first pass an English proficiency examination. Students are to take the exam as freshmen. *The proficiency test may be taken no more than three times.* Passing score for this test is 75. Any student who does not pass on the first effort will be permitted to retake the examination at a later date. Passing scores on retake examinations are 75 if the exam is taken as a sophomore and 80 for juniors and seniors.
2. To qualify for admission to JOUR 231 students must achieve at least 25 words per minute on a typing examination. This exam is administered on the first day of the JOUR 231 class.
3. To remain active in the B.S.J. program, a student must earn at least a C in all core courses.
4. No core course may be taken more than twice.

Journalism Sequences

All journalism majors complete a basic 20-hour core of five courses. These are: JOUR 221, Graphics (5); JOUR 231, News Reporting (4); JOUR 333, News Editing (4); JOUR 411, Newspaper and Communications Law (4); and JOUR 412, Ethics, Mass Media, and Society (3). A grade of C or better is required in 221, 231, 333, 411, and 412.

JOUR 105, Introduction to Mass Communication, a freshman course, is optional, but recommended for all those entering journalism.

The additional requirements for the various sequences are as follows:

Advertising Management

(Major code #6932)

JOUR 250 Advert. Prin.	5
JOUR 321 Print Advert. & Layout	4
JOUR 323 Print Advert. Prac.	2
OR	
JOUR 462 Internship	3
JOUR 375 Advert. Media Plng. & Buying	4
JOUR 450 Advert. Copy Wrng.	3
JOUR 482 R-TV Advert. & Mgt.	4
JOUR 486 Advertising Campaigns	4
Journalism electives to make 45-55 hours	
MKT 301 Mkt. Prin.	4

Public Relations

(Major code #6935)

JOUR 331 Rptng. Contemp. Issues	3
JOUR 332 Rptng. Prac.	2
OR	
JOUR 462 Internship	3
JOUR 370 Media Relations and Publicity	3
JOUR 430 Mag. Edit. & Prod.	4
JOUR 471 PR Prin.	5
JOUR 472 Adv. PR	4
Select one of the following:	
JOUR 351 News in Brdcastng.	5
JOUR 441 Mag. Feature Wrng.	4
JOUR 450 Advert. Copy Wrng.	3

Journalism electives to make 45-55 hours

Select one course from SOC 210, 211, 412,

413, or 414 4

Magazine Journalism

(Major code #6933)

JOUR 311 Hist. of Am. Jour.	4
JOUR 430 Mag. Ed. & Prod.	4
JOUR 431 Mag. Editing Practice	3
JOUR 441 Mag. Feature Wrng.	4
Select two:	
JOUR 331 Rptng. Contemp. Issues	3
JOUR 363 Review & Crit.	3
JOUR 432 Specialized Mags.	3
JOUR 442 Adv. Mag. Feature Wrng.	3
Journalism electives to make 45-55 hours	

News Writing and Editing

(Major code #6934)

JOUR 311 Hist. of Am. Jour.	4
JOUR 331 Rptng. Contemp. Issues	3
JOUR 332 Rptng. Prac. AND JOUR 334 Edit. Prac.	2
OR	
JOUR 462 Internship	3
JOUR 464 Rptng. Pub. Affairs	3
Select two:	
JOUR 351 News in Brdcastng.	5
JOUR 363 Review & Criticism	3
JOUR 441 Mag. Feature Wrng.	4
JOUR 442 Adv. Mag. Feature Wrng.	3
JOUR 465 Editorial Page	3
Journalism electives to make 45-55 hours	

Broadcast News

(Major code #6936)

JOUR 351 News in Brdcastng.	5
JOUR 353 Broadcast News Prac.	2
OR	
JOUR 462 Internship	3
JOUR 452 TV Newsfilm Prod. & Edit.	3
JOUR 455 Seminar in Brdcast. News	3
TCOM 106 Intro. to Telecommunications	4
TCOM 200A Brdcast. Wrng. & Prod. Planning	4
Journalism electives to make 45-55 hours	

Carr Van Anda Program

A junior with a 3.0 accumulative average in journalism and 2.5 accumulative average in all work may elect a sequence making up his or her own program in journalism. It will consist of the basic core of five courses plus the student's choice of journalism courses to equal 45-55 hours. The program must have the approval of the student's advisor and the director of the E.W. Scripps School of Journalism. Formal application is necessary.

SCHOOL OF TELECOMMUNICATIONS

Drew McDaniel, *Director*

Charles Clift, *Associate Director*

The School of Telecommunications offers programs of study leading to bachelor's, master's, and doctoral degrees. The baccalaureate program is a professional degree program and is designed to prepare students for meaningful careers in all aspects of telecommunications. Areas given special attention are audio and video production and the business aspects of telecommunications. Also, a

selection of courses within the major can be combined with complementary courses in other fields to develop specialized programs of study in such areas as research, performance, and nonbroadcast video.

The classroom and laboratory experiences of the students are augmented by a variety of practical experiences including work with the production unit of the University-operated cable channel, the All-Campus Radio Network, and the three University-owned and -operated stations: WOUB-AM, WOUB-FM, and WOUB-TV. Credit for such experiences is granted through TCOM 390.

Affiliation with the International Radio and Television Society, the Ohio Association of Broadcasters, National Association of Television Program Executives, and the National Association of Broadcasters provides opportunities for contacts and broad development in the broadcasting field.

Scholarships in the amount of \$850 per year are awarded to qualified first-year telecommunications majors. In addition, Dean's Achievement Scholarships and School of Telecommunications' awards are available to majors and pre-majors.

BACHELOR'S DEGREE IN TELECOMMUNICATIONS

General Requirements for All Majors

1. **Arts and humanities** — 20 quarter hours, including at least eight hours of 300- to 400-level courses. Courses may be elected in the following: art, art history, classical languages, comparative arts, English, film, modern languages, music, philosophy, and theater.

2. **Social sciences** — 20 quarter hours, including at least eight hours of 300- to 400-level courses. Courses may be elected in the following departments: anthropology, economics, history, international studies, management, marketing, political science, psychology, or sociology.

3. **Communication sciences** — 20 quarter hours, including at least eight hours of 300- to 400-level courses. Courses may be elected in: computer science, visual communication, communication management, interpersonal communication, journalism, and linguistics.

4. **Mathematics and/or natural sciences** — 10 quarter hours. Courses may be elected in the following: astronomy, biology, botany, chemistry, geological sciences, mathematics, physical science, physics, zoological and biomedical sciences, and geography courses relating to physical geography.

University General Education requirements can be used to fulfill the above requirements. With advisor's approval, courses may be selected from Afro-American studies and University Professor offerings to fulfill general requirements.

5. **Telecommunications** — the following constitute the basic core courses required of all majors:

TCOM 106 Intro. to Telecommunications	4
TCOM 200A Telecommunications Wrting. & Prod. Planning	4
TCOM 270 Telecommunications & Public	4
TCOM 453 Telecommunications Law & Regulations	4

Sequence Requirements

Undergraduate telecommunications freshmen and sophomores will be considered premajors. Generally, premajors are not permitted to enroll in telecommunications courses above the 300 level. To be eligible to transfer from premajor status to one of the three major sequences described below, a student must (1) complete 90 quarter hours; (2) attain a C+ (2.33) average in TCOM 106, TCOM 200A, and TCOM 270; and (3) have a program of study

which satisfies one of the following sequences as approved by the student's advisor. The program of study should be developed in the third quarter of the student's sophomore year.

Comprehensive Sequence

This plan of study offers students a broad exposure to telecommunications and also provides for specialization outside the School of Telecommunications. Program goals are jointly developed by student and advisor to provide adequate training in the specialization desired, and to ensure breadth of instruction in telecommunications. The following is required of students in the sequence:

TCOM courses supporting program goals	32
Corollary courses supporting program goals	35
(from no more than two departments with at least twenty hours at the 300- to 400-level)	

Professional Management/Administration Sequence

Students will be selected for this sequence each spring on a competitive basis. Applications for entry into this program are accepted only in spring quarter each year.

This plan of study is aimed at providing an understanding of the managerial process and knowledge which are basic to the development of managerial skills. The following courses are required:

TCOM 459 Audience Research	4
TCOM 460 Telecommunications Mgt.	4
TCOM 461 Telecommunications Econ.	4
TCOM 462 Broadcasting and Cable Sales Mgt.	4
Telecommunications electives with advisor approval	16

In addition to general requirements, at least 35 hours from accounting, business administration, business law, computer science, economics, finance, management, and marketing are required. Selections in this sequence must include ECON 101-102 and MGT 200 or 300.

Professional Video Production Sequence

Students will be selected for this sequence each spring on a competitive basis. This plan of study is aimed at providing advanced skills in video production with special emphasis on the creative responsibilities of production direction. The following courses are required:

TCOM 200C Video Production I	2
TCOM 208C Technical Bases of Telecommunications	4
TCOM 318 Video Production II	4
TCOM 431 Dramatic and Documentary Writing	4
OR	
TCOM 452 TV Newsfilm Production and Editing	3
TCOM 418 Video Production IIIA	4
Telecommunications electives with approval of advisor	16

In addition to major requirements, at least 35 hours outside the School of Telecommunications with the approval of advisor.

Professional Audio Production Sequence

Students will be selected for this sequence each spring on a competitive basis. This plan of study is aimed at providing advanced skills in audio production in the documentary, drama, and experimental forms.

TCOM 200B Audio Production I	2
TCOM 208 Technical Bases of Telecommunications	4
TCOM 313 Audio Production II	4
TCOM 413 Audio Production III	4
TCOM 414 Multitrack Recording	3
Telecommunications electives with approval of advisor	15

In addition to major requirements, at least 35 hours outside the School of Telecommunications with the approval of advisor.

Internships

In the senior year, majors are encouraged to undertake an internship. An internship provides 8 to 12 hours of credit for full-time work with an approved sponsor during an academic term. To qualify for an internship, a minimum accumulative grade-point average of 2.7 is required. The school offers internship opportunities each quarter in national telecommunications centers in Washington and Chicago as well as numerous opportunities in Ohio.

Other Requirements and Standards

Students transferring into the School of Telecommunications will be required to attain a C+ (2.33) average in the first 12 hours taken in telecommunications in order to remain eligible to continue as majors. Furthermore, a minimum of 20 hours in telecommunications must be taken after a student has transferred into a major sequence.

Students are expected to demonstrate proficiency in typing and basic language skills.

No course which is selected to fulfill any requirement may be taken on a pass/fail basis by a telecommunications major.

No course may be counted toward more than one type of requirement. For example, a course used to meet a general requirement may not also be used to meet a sequence requirement.

INSTITUTE OF VISUAL COMMUNICATION

Charles L. Scott, *Director*

The E.W. Scripps School of Journalism, in cooperation with the School of Art in the College of Fine Arts, offers a visual communication degree program with eight specialized sequences. Students can earn either a bachelor of science in journalism or a bachelor of fine arts degree.

The program is designed to provide students with realistic and thorough, broad-based, professionally oriented training in visual communication and journalism, while providing the necessary liberal arts and cultural background for an equally strong foundation.

Intensive training is offered in picture editing, photo communication for newspapers and magazines, photo illustration and advertising photography, multi-media, educational media, performing arts communication, medical and science illustration, and electronic visual communication (TV news).

Goals of the Institute

The goals of the Institute of Visual Communication are (1) to equip students with the necessary skills to be successful in entry-level jobs in the media and the background and motivation to enable them to compete for eventual leadership roles in the field; (2) to provide assistance and professional guidance in visual communication to working photographers, editors, and other personnel, newspapers, press services, magazines, broadcast news operations, industrial photographic departments, advertising and public relations firms and departments, trade associations, multi-media and educational media production units, and cultural and scientific visual communicators; (3) to set high standards for visual integrity and communication ethics; and (4) to foster and promote scholarly research.

The institute sponsors the Newsphoto Conference for Editors, a pioneering picture-editing workshop for word-oriented newspaper editors, founded in 1970, and still the only program of its kind. Over the years, editors from 30 states, the District of Columbia, and three Canadian provinces have attended sessions on the Athens campus. In addition, the conference has been held in Los Angeles.

Internships

In an effort to provide practical training, students are required to have at least one paid internship for a period of 10 weeks during their college careers. Any qualified student may compete for an internship. Many students have several internships before graduation.

In 1983, Ohio University visual communication students worked as photo interns on newspapers and in advertising studios in Alaska, Arizona, Florida, Kentucky, Michigan, Montana, New York, Ohio, Pennsylvania, Virginia, Washington, West Virginia, and Wisconsin.

Many Ohio University visual communication students are active members of the Ohio News Photographers Association and other state press photographers groups and are student members of the National Press Photographers Association. All students are encouraged to enter news-photo competitions for which they may be eligible. Many Ohio University students have been successful in these competitions. They have done particularly well in the annual William Randolph Hearst Foundation photojournalism competition which is open to any student taking photojournalism courses in any of the more than 80 participating colleges and universities. In recent years, Ohio University students have won first place four times, plus one second, one third, two fourth, one fifth, one sixth, and one ninth place.

Admission Requirements

Sophomore rank, a university grade-point average of 2.5, and grades of at least B in VICO 120, 121, and 122 are criteria for admission to the institute. Freshmen wishing to enter the program in their sophomore year should take VICO 120, 121, and 122 during their first year in college.

General Requirements

To meet the accrediting standards of the American Council on Education in Journalism, three-fourths of the student's program should consist of courses in the liberal arts and sciences and one-fourth in professional courses in journalism, visual communication, and photography.

Visual communication students earning the journalism degree at Ohio University meet this standard by fulfilling general and specialization area requirements. The general requirements provide a liberal arts and sciences core for all students with the following courses:

Political science (2 qtrs)
Sociology or Anthropology (2 qtrs)
Economics (2 qtrs)
Psychology (1 qtr)
History (2 qtrs)
English Composition (2 qtrs, one must be 305, 307, 308, or 309)
Statistics (1 qtr)

Plus one of the following:

Science (3 qtrs, selection approved by advisor)
OR
Language (3 qtrs basic sequence or 1 qtr advanced)
Philosophy (2 qtrs, one of which must be logic)

Specialization Area Requirements

To the liberal base, which generally is the focus of the freshman year, visual communication students working

toward a journalism degree add courses in desired areas of specialization, meeting the requirement by completing any one of three options:

1. a minimum of 36 hours in advanced courses in a single department within the College of Arts and Sciences (usually structured in accordance with the major requirements of the selected department),
2. a minimum of 18 approved hours in one Arts and Sciences department and 18 approved hours in any other series of related courses except journalism, telecommunications, and fine arts photography.

Additional nonjournalism courses are required in some visual communication sequences. No course may be counted for more than one type of requirement. For example, a course used to meet a general requirement may not also be applied to a specialization area or sequence requirement.

To assure the liberal stress of the overall program, the professional content of the B.S.J.-visual communication degree is limited to one-fourth of the 192 hours required for graduation. Credits in all courses in journalism, telecommunications, visual communication, and photography should total at least 45 hours and not more than 55 hours. All professional hours beyond 55 must be compensated for by nonprofessional hours over the required 192-hour total. Nonjournalism courses required in the visual communication core and sequences are not counted as part of the 45 to 55 total professional hours.

Visual Communication Core Requirements

All visual communication journalism majors complete a basic core of 16 courses totaling 61 to 62 hours. These are:

ART 100 Visual Art	3
ART 101 2-Dimen. Design	4
ART 151 Intro. to Graphic Design	4
AH 307 History of Photog.	4
VICO 120 Intro. to Vis. Comm.	4
VICO 121 Deliv. Syst.	4
VICO 122 Vis. Comm. Prac.	4
JOUR 221 Graphics	5
JOUR 231 News Rptng.	4
JOUR 250 Advert. Prin.	5
JOUR 325 Photojour.	3
JOUR 333 News Editing	4
JOUR 335 Pict. Editing	3
JOUR 411 Comm. Law	4
JOUR 412 Mass Med. & Soc.	3

Plus a choice of the following:

JOUR 331 Rptng. Contem. Issues	3
JOUR 363 Review & Crit.	3
JOUR 441 Mag. Feature Wrng.	4
JOUR 464 Rptng. Pub. Affairs	3
JOUR 465 Editorial Page	3

The art and art history courses do not count toward the 55-hour limit as professional courses.

Standards

1. Students must earn grades of at least C in VICO 120, 121, 122; JOUR 221, 231, 325, 333, 335, 411, and 412 to graduate.
2. To qualify to take any journalism course, students must first pass an English proficiency examination. Students are urged to take the exam as freshmen. The proficiency test may be taken no more than three times. Passing score for this test is 75. Any student who fails to pass on the first effort will be permitted to retake the exam later. Passing scores on retake examinations are 75 for sophomores and 80 for juniors and seniors.
3. To qualify for admission to JOUR 231 students must achieve at least 25 words per minute on a typing

examination administered on the first day of the class.

4. To remain a major in the visual communication program, a student must earn at least a C in all professional courses (visual communication, journalism, photography).
5. No professional course may be taken more than twice.
6. Students must pass a portfolio review at the end of the 300-level photojournalism courses to qualify for advancement to visual communication sequences.

Visual Communication Sequence Requirements

(Major code #6930)

Picture Editing

JOUR 333* News Edit.	4
JOUR 336 Adv. Pict. Edit.	3
JOUR 412* Mass Media & Soc.	3
Journalism, photo communication or illustration, telecommunications, or graphic design upperdivision courses as electives	14
total sequence requirements	24

*These courses are included in the journalism-visual communication core.

Photo Communication

JOUR 326 Adv. Photojournalism	3
OR	
ART 398	5
JOUR 327 Color News Photo.	3
OR	
ART 399	5
ART 494 Adv. Publ. Photo.	5
ART 499 Adv. Photo. Illus.	5
Journalism, photo communication or illustration, telecommunications, or graphic design upperdivision courses as electives	4-8
total sequence requirements	24

Photo Illustration

JOUR 327 Color News Photography	3
OR	
ART 399	5
ART 497 Photo Illustration	5
ART 498 Photo Illustration	5
Journalism, photo communication or illustration, telecommunications, or graphic design upperdivision courses as electives	9-11
total sequence requirements	24

Multi-media

JOUR 327 Color News Photo.	3
OR	
ART 399	5
ART 494 Adv. Publ. Photo.	5
ART 499 Photo. Illus.	5
Journalism, photo communication or illustration, telecommunications, graphic design, film, or education upperdivision courses as electives	9-11
total sequence requirements	24

Educational Media

EDM 480 Intro. to Educ. Media	4
EDM 482 Prod. of Instruct. Mat.	4
JOUR 327 Color News Photo.	3
OR	
ART 399	5
FILM 340 Film Techniques	3
ART 499 Photo Illus.	5
Journalism, photo communication or illustration, telecommunications, graphic design, film, or education upperdivision courses as electives	3-5
total sequence requirements	24

Performing Arts Communication

JOUR 326 Adv. Photojournalism	3
OR	
ART 398	5
JOUR 327 Color News Photography	3
OR	
ART 399	5
Theater technical production or stagecraft course	6
Journalism, photo communication or illustration, telecommunications, dance, graphic design, film, or theater upperdivision courses as electives	8-12
total sequence requirements	24

Medical or Science Illustration

JOUR 326 Adv. Photojournalism	3
OR	
ART 398	5
JOUR 327 Color News Photography	3
OR	
ART 399	5
JOUR 492 Science & Med. Rptng.	3
ZOOL 480 Microscopy & Photomicrography	3
Journalism, photo communication or illustration, telecommunications, graphic design, or film upperdivision courses as electives	8-12
total sequence requirements	24

Electronic Visual Communication

TCOM 106 Intro. to Telecommunications	4
TCOM 452 Electronic Newsgathering	3
OR	
JOUR 452 TV Newsfilm	3
FILM 340 Film Techniques	3
FILM 361 Motion Picture Prod. I	5
FILM 362 Motion Picture Prod. II	5
Journalism, photo communication or illustration, telecommunications, graphic design, or film upperdivision courses as electives	4
total sequence requirements	24

CENTER FOR COMMUNICATION MANAGEMENTJoseph H. Berman, *Director***Purposes and Objectives**

The purpose of the Ohio University Center for Communication Management is to provide academic studies and research for the training of professionals in the modern field of point-to-point telecommunications. Such communication managers help design, supervise, and operate specialized communication systems in private industry, common carriers, and the government.

Until the 1970s, professionals in the field were trained primarily within their companies. But with the rapid expansion of technology and its applications, telecommunications began to ask for help from higher education. The Ohio University program is the result of five years of consultation and planning with experts at both the academic level and at the applied level.

The curricular program is based in the philosophy that the communication manager must have a broad basic knowledge and skill in such diverse areas as technology, business, and written and verbal communication. Students take more than three-fourths of their courses in other departments.

While working toward their degrees, students are encouraged to gain practical experience through field stud-

ies, practica, and internships. The University Telecommunications Center and other facilities contain equipment to provide opportunities to observe and use communication systems: voice, image, and data or message transmission.

Bachelor of Science in Communication Management

(Major code #5329)

At the time of its founding in the fall of 1980, the center was the first program of its type in Ohio and only the second in the United States at the baccalaureate level. It is a multi-disciplinary major with students taking courses in nine other schools and departments, in addition to the center. The program was designed with the assistance of the International Communications Association and other telecommunications professionals.

Curricula and Requirements

A communication manager is asked to have reasonable familiarity with a number of concerns, both general and technical. The communication management major requires a multi-disciplinary approach involving nine participating schools and departments, in addition to coursework offered by the center itself.

To remain active in the communication management major, a student must maintain a 2.0 average in *all* required courses, not solely those labeled as communication management courses.

A specialty track system is being prepared; students should request copies from the director. Each major must complete the core courses, track requirements, and other University requirements.

Requirements are structured to simultaneously meet the University's General Education requirements, as well as the needs of the major field.

Core Courses

1. General
 - ECON 101, 102 8
 - English (composition) 5
 - Tier I mathematics 4-5
 - Technical writing (ENG 305J or MGT 325J) 4
 - Other Tier requirements
2. Technical and Business
 - ACCT 201, 202 8
 - CS 120, 230 10
 - IT 337 3
 - MGT 200 or MGT 300 4
 - Other track requirements
3. General Communication
 - INCO 101 or 103, 234, 245 12-13
 - JOUR 221 5
 - TCOM 208, 421 4
 - VICO 122 4
4. Communication Management
 - COMT 100, 270, 370, 462, 470, at least 1 topical seminar 24
5. Electives
 - As recommended by advisor

Although a number of variables might affect the order in which an individual student would take the required and recommended courses, a typical year-by-year schedule may be obtained from the director.

College of Education

Allen Myers, *Dean*

Ragy Mitias, *Associate Dean*

The College of Education is a professional college and therefore its major goal is the preparation of persons to become professionals in the educative process both in and out of school settings. A wide range of programs is offered for teaching in elementary and high schools and other educational positions. The college provides graduate study in a wide range of professional education fields.

All undergraduate programs include a broad base of general education, intensive preparation in the subject matter field, and professional emphasis which combines education theory with actual practice in meeting the responsibilities of the profession. Each program is thus designed to prepare students to enter professional positions possessing the liberal background, functional knowledge, and professional understanding and skill which are required for professional success.

The College of Education is accredited by the North Central Association and the National Council for Accreditation of Teacher Education and is approved for teacher training by the State Department of Education of Ohio.

BACHELOR OF SCIENCE IN EDUCATION

The degree, bachelor of science in education, represents the completion of a program designed to develop in the student competence in three areas: the broad awareness of the principal academic fields developed through a true university education; the deeper study of the particular areas in which the student seeks the undergraduate mastery necessary for teaching and/or applying these subjects; and the understanding of the professional responsibilities of education and demonstrated skill in meeting them through extensive field experience.

The degree is granted upon completion of the general graduation requirements of the University, including a minimum of 192 quarter hours with a point-hour ratio of 2.0 (C) on all hours attempted, but including only the final hours and points in repeated courses, and in addition a 2.0 point-hour ratio in the major field.

Besides these general University requirements each student must complete the requirements established for the program he or she is following.

NOTE: For pass/fail option, see the *Credit and Grading* section of this catalog.

A student who plans to teach in the elementary grades enrolls in the College of Education. The curricula offered by the College of Education include the requirements of the State Department of Education and qualify a student to obtain a provisional certificate to teach in the elementary grades and kindergarten, depending upon the student's preparation.

A student who plans to teach high school academic or special subjects ordinarily enrolls in the College of Education. The curricula of the College of Education include the requirements of the State Department of Education and qualify the student to obtain a provisional certificate to teach the subjects indicated on the certificate.

A student who plans to teach in special education classrooms registers in the College of Education. The curricula offered by the College of Education include the requirements of the State Department of Education and qualify a student to obtain a provisional certificate to teach in classrooms for the educable mentally retarded and learning disabled and for moderately, severely, and profoundly retarded.

REVISED PROGRAMS

All undergraduate teacher education programs at Ohio University have been revised recently to conform to new standards for certification issued by the State Department of Education of Ohio. The new programs and courses are included in this bulletin.

These new programs and courses apply to all students entering Ohio University in the 1984-85 academic year and, in general, to students who had earned less than 60 quarter hours of credit by the beginning of fall quarter, 1980. Students with questions about their program requirements may contact their advisors and/or the Student Personnel Services Office; 124 McCracken Hall; Ohio University; Athens, Ohio 45701-2979 (phone 614/594-5917).

SELECTIVE ADMISSION AND RETENTION

The college has a program of selective admission and retention that applies to all students who intend to complete the teacher preparation program through Ohio University. The purpose of the selective admission and retention program is to provide both the student and the college with an opportunity to assess each student's capabilities

as a prospective teacher. There are three selection phases in this program, two of which are described below, and the third phase is detailed under Student Teaching.

A complete description of the selective admission and retention policies and procedures is available from Student Personnel Services, 124 McCracken Hall.

Admission to Professional Education

Students must be admitted to professional education prior to taking any of the following: elementary education courses—any EDEL courses numbered 300 or above; special education courses—any EDSP courses in Block II or above; or secondary education courses—any EDSE courses.

Application for admission to teacher education should be made during the third quarter of the freshman year. The criteria which students must meet by the end of the quarter in which they apply are the following:

1. Completion of 45 quarter hours of credit with an overall grade-point average of 2.0.
2. A 2.0 grade-point average and no grade below a C- is acceptable towards completion of the following courses:
 - a. PSY 101—General Psychology
 - b. Any required remedial work in English composition and mathematics. Students should have made progress toward completing their requirements for freshman composition, Tier I mathematics, and INCO 101/103 with grades of C- or better in all courses.

3. Satisfactory performance on the Speech Proficiency Examination which is offered through the Speech and Hearing Clinic, Lindley Hall, on the Athens campus or by approved individuals at the branch campuses.

All sophomores and students enrolled in their first professional education course are required to complete successfully a test of basic skills before continuing their studies in education.

Admission to Advanced Standing in Professional Education

Students must be admitted to advanced standing prior to taking any of the following courses: elementary education courses—any EDEL courses numbered 300 or above; special education courses—any EDSP courses in Block III or above; or secondary education courses—any EDSE courses numbered 300 or above.

Application for advanced standing in professional education should be made at the end of the third quarter of the sophomore year. The criteria which students must meet by the end of the quarter in which they apply are the following:

1. General requirements
 - a. Completion of 90 quarter hours of credit with an overall g.p.a. of 2.25.
 - b. Satisfactory reports from:
 - (1) Hudson Health Center
 - (2) Student Judiciaries
 - c. A 2.0 grade-point average and no grade below a C- is acceptable toward completion of the following courses:
 - (1) Tier I freshman composition requirement.
 - (2) INCO 101—Fundamentals of Speech or INCO 103—Public Speaking. (For speech and hearing therapy majors *only*, HSS 107—Voice and Articulation—is the required course in this category; and INCO 101 and 103 are optional.)
 - (3) Tier I quantitative skills requirement
2. Specific requirements for elementary education
 - a. Completion of the following courses with a 2.0

g.p.a. and a minimum grade of C- in each:

- (1) EDCI 275 or PSY 275
- (2) EDEL 200 (or PSY 273 or HECF 160)
- (3) EDEL 200L
- (4) EDSP 271
- (5) EDSP 160
- b. A satisfactory recommendation from the faculty in elementary education is necessary for the student's continuation in the elementary education program.
3. Specific special education requirements (EMR/LD)
 - a. Completion of all courses in Blocks I and II with a 2.30 g.p.a.
 - b. Each course in blocks I and II must be completed with a grade of C- or better.
 - c. A satisfactory recommendation from the faculty members coordinating Blocks I and II based upon review by all the faculty teaching in each block is necessary for the student's continuation in the special education program.
4. Specific requirements for secondary and special fields education.
 - a. Completion of the following courses with a g.p.a. of 2.30 and a minimum grade of C- in each:
 - (1) EDSE 250
 - (2) EDSE 250L
 - (3) EDSE 270
 - (4) EDSE 270L
 - (5) EDCI 275 or PSY 275
 - b. A 2.30 accumulative g.p.a. in each teaching field for which certification is being sought.
 - c. A satisfactory recommendation from the faculty in secondary education is necessary for the student's continuation in the secondary education program.
5. Specific requirements for speech and hearing therapy
 - a. Completion of the following courses with a g.p.a. of 2.30 and a minimum grade of C- in each:
 - (1) EDCI 275 or PSY 275
 - (2) EDEL 200L
 - (3) EDSP 270
 - (4) EDSP 271 or PSY 376
 - b. A 2.30 accumulative g.p.a. in all hearing and speech science courses completed.
 - c. A satisfactory recommendation from:
 - (1) faculty member who taught the student in HSS 240, Practicum
 - (2) faculty member who taught the student in EDSP 270, Classroom Management of Children.

SCHOOL OF APPLIED BEHAVIORAL SCIENCES AND EDUCATIONAL LEADERSHIP

The School of Applied Behavioral Sciences and Educational Leadership offers only graduate programs. However, some undergraduate courses are available in guidance and counseling. Students interested in graduate programs should contact the Student Personnel Services Office, 124 McCracken Hall.

SCHOOL OF CURRICULUM AND INSTRUCTION

The School of Curriculum and Instruction comprises three major academic areas — elementary education, secondary education, and special education — and courses in

educational media, international and comparative education, and educational foundations. The school provides the opportunity for students admitted to teacher education to pursue undergraduate courses leading to teacher certification in the state of Ohio. Listed below are program descriptions and course requirements for each of the certification patterns offered.

A junior or senior who has a 3.0 accumulative grade-point average and is able to schedule 15 to 18 hours of independent study in the department may be eligible for departmental honors. Honors work extends beyond the required teacher-education course sequences.

ELEMENTARY EDUCATION PROGRAM

In order to receive a B.S.Ed. degree and certification in elementary education, students must complete the total program in elementary education. Upon completion of the program students are eligible for a four-year provisional teaching certificate for teaching in grades one to eight. Kindergarten certification may also be obtained by completing the necessary kindergarten requirements as specified below:

Required General Education Courses

PSY 101 Gen. Psych.	5
English	21-23

Freshman and junior English composition courses taken to satisfy the University English composition requirement (See English Composition Requirement in the *Graduation Requirements* section of this catalog) may be used toward completion of these hours.

Required: INCO 103 Pub. Speaking	4
LING 270 Nature of Lang.	5
EDEL 321 Children's Lit.	3
EDEL 321L Field/Clinical Exp.	1
ART 360 Art for Elementary Teachers	6
MUS 160 Music Fundamentals	3
MUS 161 Mus for Clssrm Teachers	3
Natural Science	12

All students must complete at least 12 quarter hours of science including at least one course in biological science and one course in physical science. Recommended choices include BOT 101 or ZOOL 101, BOT 102, physical science with a lab. Other possibilities include any courses in zoology, botany, chemistry, physics, and geological sciences. All courses taken to complete this requirement must contain a laboratory component.

Mathematics	9
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MATH 120 and 121 are recommended; however, any mathematics courses numbered above 120 and equaling nine quarter hours except MATH 151 would be acceptable.

Social Studies	27
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Each student is required to complete at least 27 quarter hours and a minimum of seven courses in social studies. Social studies is defined as any history, political science, economics, sociology, anthropology, social welfare, geography, or economic education course.

Specific requirements are the completion of at least one course in American history or American government, GEOG 121 Cultural Geog, and EDGS 410.

Physical Education	
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HEALTH 202 Personal & Community Health	4
HPES 270 Tehng. Phys. Ed.	3

No more than six hours of HSC activity courses may be counted toward the degree and none count in general education.

Students must also complete Ohio University's General Education Program (see *General Education Requirement* section of this catalog) and are urged to consult with their advisors to plan to meet both sets of general education requirements.

Professional Sequence

The following professional courses are required of all elementary education majors. To be eligible to enroll in

these courses students should note the prerequisites in the *Courses of Instruction* section of this catalog.

EDEL 200 Studies of Children	4
EDEL 200L Field/Clinical Exp.	1
EDSP 271 Intro. Excep. Children	3
EDSP 160 Field Exp. Spec. Educ.	1
EDCI 275 Lrng. Process Classrm	5
OR	
PSY 275 Educational Psych.	4
EDEL 310 Teach Lang. Arts Elem. Sch.	3
EDEL 310L Field/Clinical Experience	2
EDEL 311 Teach Read Elem. Sch.	4
EDEL 311L Field/Clinical Experience	1
EDEL 330 Teach Math in Elem. Sch. K-3	2
EDEL 330L Field/Clinical Experience	1
EDEL 331 Teach Math in Elem. Sch. 4-8	2
EDEL 331L Field/Clinical Experience	1
EDEL 340 Teach Science Elem. Sch.	4
EDEL 350 Teach Soc. Studies Elem. Sch.	3
EDEL 350L Field/Clinical Experience	1
EDEL 372 Managing Elem. Classroom	2
EDEL 460 Child and the Curriculum	4
EDM 332 Microcomputer Applications in Ed.	4
EDM 480 Intro. to Educ. Media	4
EDCI 401 Advanced Field Exp.—Urban	2

Kindergarten-Primary Sequence.

Students seeking kindergarten-primary certification should complete the regular elementary education program plus EDEL 306 (6 hours), specialized course in theory, materials, and methods of kindergarten education and EDPL 461 (7 hours), Student Teaching in Kindergarten. Students seeking this certification will complete one quarter of student teaching in an elementary situation followed by an additional part-time student teaching assignment in a kindergarten.

20-Hour Concentration.

A 20-quarter-hour concentration is required. This concentration may be in any department outside the College of Education or in educational media. The 20 hours are to be beyond any of the general education requirements. For example, if a student wishes to complete the concentration in psychology, he or she would have to complete 20 hours beyond PSY 101 and PSY 275 which are already required. A student may not combine several fields to make a concentration. In other words, the 20 hours must be in one field or one department. The only exception is in the case of a person wishing to concentrate in science. He or she may combine several sciences to complete the concentration. Note that special education can NOT be used as a 20-hour concentration.

Professional Laboratory Experience

EDPL 461 and 462 Stu. Tehng. in Elem. School	7 + 6
EDPL 465 Stu. Tehng. Seminar	3

These three courses are taken concurrently in one quarter and constitute the student teaching requirement. Additional student teaching is required of students seeking kindergarten certification. A person should make an application for student teaching by December 1 of the year prior to the year in which student teaching is to be taken. For example, anyone doing student teaching during any of the three quarters of the school year 1985-86 should apply by December 1, 1984. For further information contact the Field Experience Office, 129 McCracken Hall.

ELEMENTARY EDUCATION/ EARLY CHILDHOOD

The purpose of this program is to prepare persons to meet State of Ohio teacher certification requirements as

elementary teachers and to be prepared to be teachers in preschool. At the present time, there is no teaching certificate for preschool; however, such certification is being discussed and may be enacted in the near future. The preschool aspect of this major meets what is currently being discussed as possible certification requirements.

The current program in preschool teaching is part of the School of Home Economics and the current program in elementary education is part of the School of Curriculum and Instruction. This program would provide for each student to choose the school and college in which he or she wishes to enroll; therefore, a student could earn either a bachelor of science in home economics or a bachelor of science in education. Either way the student chooses, he or she would follow the same program and earn the same certificate.

Students are advised that the elementary education/early childhood program is a *dual concentration* and so is likely to require at least one additional quarter beyond the 12 quarters ordinarily needed for a bachelor's degree. Students in the program should schedule carefully and work closely with their advisors.

Required General Education Courses

Students must also complete Ohio University's General Education Program (see *General Education Requirement* section of this catalog) and are urged to consult with their advisors to plan to meet both sets of general education requirements.

PSY 101 General Psych.	5
ART 360 Art for Elem. Teachers	6
English	21-23
Freshman composition requirement	5
Junior composition requirement	4
INCO 103 Pub. Spkg.	4
LING 270 Nature of Language	5
EDEL 321 Children's Lit.	3
EDEL 321L Field/Clinical Experience	1
MUS 160 Music Fundamentals	3
MUS 161 Music for Classroom Teachers	3
OR	
MUS 262 Music in Early Childhood	3
Natural Science	13
BOT/ZOOL 101 Prin. of Biol.	5
ZOOL 103 Hum. Biol.	4
One physical science with laboratory component	4
Mathematics	9-10
MATH 120 Elem. Topics in Math	5
MATH 121 Foundations of Math	5

The two courses above are recommended; however, any mathematics courses numbered above 120 and equaling nine quarter hours is acceptable (except MATH 151).

Social Sciences	27
SOC 101 Intro. to Sociology	5
ECON 101 Prin. of Econ.	4
OR	
ECED 346 Econ. in Curriculum	3-5
GEOG 121 Elements of Cultural Geog.	4
U.S. history or political science	4
HECF 360 Human Sexuality	3
SOC 201 Social Problems	4
OR	
SOC 223 American Society	4
HECF 371 Family Development	3
Physical Education	7
HPES 270 Tchng. of Phys. Ed.	3
HLTH 202 Persnl. & Comm. Health	4
OR	
HLTH 227 First Aid	4

Major Requirements

HECF 160 Intro. to Child Development	4
OR	
EDEL 200 Studies of Children	4
OR	
PSY 273 Child & Adol. Psych.	4
EDSP 271 Intro. Except. Children	3
EDSP 160 Field Exp. Spec. Education	1
EDCI 275 Lrng. Process in the Classroom	5
OR	
PSY 275 Educational Psych.	4
EDEL 200L Field/Clinical Exp.	1
EDEL 310 Teach. Lang. Arts Elem. Sch.	3
EDEL 310L Field/Clinical Experience	2
EDEL 311 Teaching Reading Elem. Sch.	4
EDEL 311L Field/Clinical Experience	1
EDEL 330 Teach Math in Elem. Sch. K-3	2
EDEL 330L Field/Clinical Experience	1
EDEL 331 Teach Math in Elem. Sch. 4-8	2
EDEL 331L Field/Clinical Experience	1
EDEL 340 Teach Science Elem. Sch.	4
EDEL 350 Teach Soc. Studies Elem. Sch.	3
EDEL 350L Field/Clinical Experience	1
EDEL 372 Managing Elem. Classroom	2
EDEL 460 Child and the Curriculum	4
EDM 332 Microcomputer Applications in Ed.	4
EDM 480 Intro. to Educ. Media	4
EDCI 401 Advanced Field Experience-Urban	2
EDEL 306 Kindergarten Educ.	6
HECF 361 Prin. of Preschool Guidance	4
EDGS 410 Human Relations	3
HECF 463 Preschool Administration	5
HECF 363 Creative Exper. with Preschool Child	4
OR	
HECF 364 Premath & Sci-Young Children	4
HECF 462 Readings in Child Development and/or Family Living A, B, C (Choose 2)	4
HEFN 232 Infant and Child Nutrition	4
OR	
HEFN 128 Intro. to Nutrition	4

Professional Laboratory Experience

EDPL 461 and 462 Stu. Tchng. in Elem. School	7 + 6
EDPL 465 Stu. Tchng. Seminar	3

These three courses are taken concurrently in one quarter and constitute the student teaching requirement. A person should make an application for student teaching by December 1 of the year prior to the year in which student teaching is to be done. For example, anyone doing student teaching during any of the three quarters of the school year 1985-86 should apply by December 1, 1984. For further information contact the Field Experience Office.

HECF 464 Early Childhood Practicum	6
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Students must sign up with the director of the Child Development Center at least one year in advance.

Procedures for Transferring from One Type of Certificate to Another

Elementary to High School

The holder of a standard elementary teacher's certificate may obtain a high school teacher's certificate by completing the teaching field requirements and a methods course for teaching at the secondary level.

High School or Special to Elementary (Retraining)

The holder of a provisional, professional, or permanent high school or special teacher's certificate may obtain a certificate valid for elementary teaching upon submitted evidence of the satisfactory completion of the following coursework in elementary education:

- a. Purposes and practices of the elementary school — EDEL 460
- b. Methods of teaching reading — EDEL 310, 310L, 311, 311L
- c. Methods of teaching arithmetic — EDEL 330, 330L, 331, 331L
- d. Child psychology — EDEL 200

The retraining certificate may be converted into a provisional elementary certificate with the completion of additional hours from specific courses in English and communications, music, art, health, and physical education. Courses in American history or political science, other social studies, biology, and physical science must complete deficient areas before application is made for the standard elementary certificate. The retraining certificate is valid for four years and may not be renewed.

MIDDLE/JUNIOR HIGH SCHOOL EDUCATION PROGRAMS

Elementary Certification with Language Arts/Social Studies Emphasis

In order to receive a B.S.Ed. degree in middle school education with certification in elementary education (language arts/social studies emphasis), students must complete the following program. Upon completion of the program, a student is eligible for a four-year provisional teaching certificate for teaching in grades 1 through 8 with validation to teach remedial reading in grades K through 12. Kindergarten certification may also be obtained by completing the necessary kindergarten requirements as specified below.

Required General Education Courses

PSY 101 General Psychology	5
ART 360 Art for Elem. Teachers	6
MUS 160 Music Fundamentals	3
MUS 161 Music for Classroom Tchr.	3

Natural Science	12
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All students must complete at least 12 quarter hours of science including at least one course in biological science with a lab (recommended choices include BOT 101 or ZOOL 101; BOT 102) AND one course in physical science with a lab (recommended choices include physical world, geology, chemistry, physics). All courses taken to complete this requirement must contain a laboratory component.

Mathematics	9
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Math 120 and 121 are recommended, however, any mathematics course numbered above 120 and equaling nine quarter hours would be acceptable (except Math 151).

Physical Education	7
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HLTH 202 Pers. & Comm. Health	4
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HPES 270 Teaching of P.E.	3
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No more than six hours of HPES activity courses may be counted toward the degree and none count in general education.

Students must also complete Ohio University's General Education Program (see *General Education* section of this bulletin) and are urged to consult with their advisors to plan to meet both sets of general education requirements.

Professional Sequence

EDEL 200 Studies of Children	4
EDEL 200L Field/Clinical Exp.	1
EDSP 271 Intro Exception Child	3
EDSP 160 Field Exp. Spec. Educ.	1
EDCI 275 Long Process in Classroom	5
EDEL 310 Tchng Lang Arts Elem Sch.	3
EDEL 310L Field/Clinical Exper.	2
EDEL 311 Tchng Reading Elem Sch	4
EDEL 311L Field/Clinical Exper	1
EDEL 330 Tch Math Elem Sch K-3	2
EDEL 330L Field/Clinical Exper	1

EDEL 331 Tch Math Elem Sch 4-8	2
EDEL 331L Field/Clinical Exper	1
EDEL 340 Tch Science Elem Sch	4
EDEL 350 Tch Soc Studies Elem Sch	3
EDEL 350L Field/Clinical Exper	1
EDEL 372 Managing Elem Classroom	2
EDEL 460 Child and the Curriculum	4
EDM 480 Intro. to Educ Media	4
EDCI 401 Adv. Field Exper/Urban	2
EDCI 461 Intro to Individualization of Education	4
EDCI 492 Middle School Education	5

EDM 332, Microcomputer Applications in Education, is highly recommended as an elective.

Major Requirements

Social Studies	30
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Each student is required to complete at least 30 quarter hours and a minimum of seven courses in social studies. Social studies is defined as any history, political science, economics, sociology, anthropology, social welfare, geography, and economic education courses.

Specific requirements are the completion of at least one course in American history or American government; GEOG 121, Cultural Geography; and EDGS 410.

Language Arts	44-45
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Freshman and Junior English Composition courses taken to satisfy the University English composition requirement (See English Composition Requirement in the *Graduation Requirements* section of this catalog) may be used toward completion of these hours. Required:

INCO 101 Fundamentals	3
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OR

INCO 103 Public Speaking	4
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LING 270 Nature of Language	5
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EDEL 321 Children's Lit.	3
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EDEL 321L Field/Clinical Exp.	1
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EDEL 411 Diag. & Treatment of Reading Disabilities	4
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EDEL 412 Reading Lab Practicum	4
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EDSE 420 Tch. Reading Jr./Sr. HS	4
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EDSE 420L Tch. Reading/Fld. Exp.	1
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10 quarter hours of English at the 200 level or higher.

NOTE: Students who complete this program also receive validation to teach remedial reading in grades K-12.

Professional Laboratory Experience

EDPL 461 & 462 Student Teaching in Middle School	13
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EDPL 465 Stu. Tchng. Seminar	3
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These three courses are taken concurrently in one quarter and constitute the student teaching requirement. A person should make an application for student teaching by December 1 of the year prior to the year in which student teaching is to be done. For example, anyone doing student teaching during any of the three quarters of the school year 1985-86 should apply by December 1, 1984. For further information, contact the Field Experience Office.

Kindergarten-Primary Sequence

Students seeking kindergarten-primary certification should complete the above program; EDEL 306 (6 hrs), specialized course in theory, materials and methods of kindergarten education; and EDPL 461 (7 hrs), Student Teaching in Kindergarten. Students seeking this certification will complete one quarter of student teaching in an elementary situation followed by an additional part-time student teaching assignment in a kindergarten.

Reminder: All students pursuing teacher education programs at Ohio University are subject to the Selective Admission and Retention Program in teacher education. Criteria and procedures are available in the Student Personnel Services Office, 124 McCracken Hall.

NOTE: Students exempt from both freshman and junior English composition requirements must still complete a minimum of five hours of English.

Elementary Certification with Mathematics/Science Emphasis

In order to receive a B.S.Ed. degree in middle school education with certification in elementary education (mathematics/science emphasis), students must complete the following program. Upon completion of the program, students are eligible for a four-year provisional teaching certificate for teaching in grades one to eight. Kindergarten certification may also be obtained by completing the necessary kindergarten requirements as specified below.

Required General Education Courses

PSY 101 General Psychology	5
ART 360 Art for Elem. Teachers	6
MUS 160 Music Fundamentals	3
MUS 161 Music for Classroom Tch.	3
English	21-23

Freshman and junior English composition courses taken to satisfy the University English composition requirement (See English Composition Requirement in the *Graduation Requirements* section of this catalog) may be used toward completion of these hours. Required:

INCO 101 Fundamentals	3
OR	
INCO 103 Public Speaking	4
EDEL 321 Children's Lit.	3
EDEL 321L Field/Clinical Exp.	1

Social Studies

Each student is required to complete at least 27 quarter hours and a minimum of seven courses in social studies. Social studies is defined as any history, political science, economics, sociology, anthropology, social welfare, geography, and economic education courses.

Specific requirements are the completion of at least one course in American history or American government; GEOG 121, Cultural Geography; and EDGS 410.

Physical Education	7
HLTH 202 Pers. & Comm. Health	4
HPES 270 Teaching of P.E.	3

No more than six hours of HPES activity courses may be counted toward the degree and none count in general education.

Students must also complete Ohio University's General Education Program (see General Education Requirement in the *Graduation Requirements* section of this bulletin) and are urged to consult with their advisors to plan to meet both sets of general education requirements.

Professional Sequence

EDEL 200 Studies of Children	4
EDEL 200L Field/Clinical Exp.	1
EDSP 271 Intro Exception Child	3
EDSP 160 Field Exp. Spec. Educ.	1
EDCI 275 Lrng Process in Classrm.	5
EDEL 310 Tchng Lang Arts Elem Sch	3
EDEL 310L Field/Clinical Exper	2
EDEL 311 Tchng Reading Elem Sch	4
EDEL 311L Field/Clinical Exper	1
EDEL 331 Tch Math Elem Sch 4-8	2
EDEL 331L Field/Clinical Exper	1
EDEL 340 Tch Science Elem Sch	4
EDEL 350 Tch Soc Studies Elem Sch	3
EDEL 350L Field/Clinical Exper	1
EDEL 372 Managing Elem Classroom	2
EDEL 460 Child and the Curriculum	4
EDM 480 Intro. to Educ Media	4
EDCI 401 Adv. Field Exper/Urban	2
EDCI 461 Intro to Individualization of Education	4
EDCI 492M Middle School Education	5

EDM 332, Microcomputer Applications in Education, is highly recommended as an elective.

Major Requirements

Mathematics	30
MATH 113 Algebra	5
MATH 263A Anal. Geometry & Calc.	5
MATH 263B Anal. Geometry & Calc.	5

MATH 263C Anal. Geometry & Calc.	5
MATH 314 Elem. Abstract Algebra	5
MATH 330 Foundations of Geometry	5
NOTE: With the addition of MATH 320, Teaching of Mathematics in Secondary School, the student will also receive certification to teach mathematics in high school.	

Science	31
BOT 110 Introduction to Botany	6
OR	
ZOOL 150 Introduction to Zoology	6
BOT 111 Introduction to Botany	6
ZOOL 151 Introduction to Zoology	6
CHEM 121 Principles of Chemistry	4
GEOL 101 Introductin to Geology	5
PHYS 201 Introduction to Physics	4
(Note: OR complete the approved minor in one of the science areas [30-50 hours]. With the addition of the appropriate methods course, the student will receive certification to teach the specific science in high school.)	

Professional Laboratory Experience

EDPL 461 and 462 Student Teaching in Middle School	13
EDPL 465 Student Teaching Seminar	3

These three courses are taken concurrently in one quarter and constitute the student teaching requirement. A person should make an application for student teaching by December 1 of the year prior to the year in which student teaching is to be done. For example, anyone doing student teaching during any of the three quarters of the school year 1985-86 should apply by December 1, 1984. For further information, contact the Field Experience Office.

Kindergarten-Primary Sequence

Students seeking kindergarten-primary certification should complete the above program; EDEL 306 (6 hrs), specialized course in theory, materials and methods of kindergarten education; and EDPL 461 (7 hrs), Student Teaching in Kindergarten. Students seeking this certification will complete one quarter of student teaching in an elementary situation followed by an additional part-time student teaching assignment in a kindergarten.

Reminder: All students pursuing teacher education programs at Ohio University are subject to the Selective Admission and Retention Program in teacher education. Criteria and procedures are available in the Student Personnel Services Office, 124 McCracken Hall.

NOTE: Students exempt from both freshman and junior English composition requirements must still complete a minimum of five hours of English.

Secondary Certification with Mathematics/Science Emphasis

Professional Requirements

(43-46)	
EDCI 275 Lrng. Proc. in the Classrm.	5
OR	
PSY 275 Educational Psyc.	4
EDSE 250 Analysis of Tch. Char. & Teaching Tasks	4
EDSE 250L Field Experience	2
EDSE 270 Studies of the Learner:	
Development & Exceptionalities	3
EDSE 270L Field Experience	1
EDSE 351 Instruc. Proc. & Curr.	5
Methods in Major Field	3-6
(If a methods professor does not require and certify 30 clock hours of field, laboratory, and clinical experience, students must also register for EDPL 360, Field Experience in Elementary or Secondary Schools, to obtain the required field contact hours.)	
EDM 480A Intro. to Educ. Media	2
EDCI 401 Advanced Field Experience-Urban	2

EDSE 420 Teaching Reading in the Content Areas	4
EDSE 420L Field Experience	1
EDCI 461 Intro to Individualization of Education	4
EDCI 492M Middle School Education	5
EDCI 480 Teacher, School, and Society	3

EDM 332, Microcomputer Applications in Education, is highly recommended as an elective.

Professional Laboratory Experience

EDPL 463-464 Student Teaching in Middle School	13
(EDPL 461 may be substituted for EDPL 464 where appropriate.)	
EDPL 465 Student Teaching Seminar	3

These three courses are taken concurrently in one quarter and constitute the student teaching requirement. A person should make an application for student teaching by December 1 of the year prior to the year in which student teaching is to be done. For example, anyone doing student teaching during any of the three quarters of the school year 1985-86 should apply by December 1, 1984. For further information contact the Field Experience Office.

Required General Education Courses

All students in secondary academic or special fields in teacher education (except home economics education) must complete 45 hours of general education courses in order to be eligible for graduation with a B.S. Ed. degree or teacher certification or both.

Students must also complete Ohio University's General Education Program (see General Education Requirement in the *Graduation Requirements* section of this catalog) and are urged to consult with their advisor to plan to meet both sets of general education requirements.

The breakdown of these general education course requirements is as follows:

Science and Mathematics.

Each student is required to complete at least one course in science and one course in mathematics. Appropriate science courses are: astronomy, chemistry, physics, botany, zoological and biomedical sciences, physical science, geological sciences, and PSY 226, 312, and 314. Any course in the mathematics department except 011, 032, 101, 109A, 109B, 320, and 420 is acceptable for the mathematics requirement. Also, Psy 121 counts toward the mathematics requirement. Computer science courses do not satisfy this requirement.

Comparative Arts and/or Philosophy.

Each student is required to complete at least two courses in this area. The two courses need not be in one field. Possibilities include any courses in the Philosophy Department; Comparative Arts Department; HUM 107, 108, 109, 307, 308, and 309; theater history courses; Art History Department; Art Department except for ART 360, 460, 461, 462; School of Music courses except for music education courses, music therapy courses, and the one- or two-hour participation courses.

Social Studies.

Each student is required to complete at least two courses in social science. The two courses need not be in the same field. PSY 101, which is required, is included as one of the social science courses. Other possibilities include any course in anthropology, economics, economic education, history, political science, sociology, social work, geography, and psychology, EXCEPT PSY 275, 121, 226, 312, & 314.

English and/or Foreign Language.

Each student is required to complete at least two courses in English and/or foreign language. Freshman and junior English composition courses taken to satisfy the University English composition requirement (See English Composition Requirement in the *Graduation Requirements* section of this catalog) may be used toward completion of these hours. The two courses need not be in the same field. INCO 103 is a specific requirement in this area and is counted as one of the two courses needed. Possibilities in this area include all English courses EXCEPT ENG 450A and 450B; any linguistics

courses; any foreign language courses EXCEPT ML 410 and 445; HUM 107, 108, 109, 307, 308, and 309 (these humanities courses may NOT count toward the general education course requirements in both the English and/or foreign language field AND the comparative arts and/or philosophy field).

If two courses in each of the above fields do not add up to a total of 45 hours, then a student must elect sufficient hours in one or a combination of the above areas to bring the total hours in general education courses to 45 hours.

If a student's major OR second teaching field is the same as one of the above areas, then ten hours of the major or minor may be counted toward the corresponding general education field as well as the major or minor. For example: If the student's major is English, ten hours of English may count toward the 45-hour total of general education courses and toward Field 4, above, which is English and/or Foreign Language.

No more than six hours of HPES activity courses may be counted toward the degree except for majors or minors in physical education, and none may count in general education.

Major Requirements

Mathematics	30
MATH 263A Analytic Geometry & Calc.	5
MATH 263B Analytic Geometry & Calc.	5
MATH 263C Analytic Geometry & Calc.	5
MATH 314 Elem. Abstract Algebra	5
MATH 330 Foundations of Geometry	5
Elective: A math course at 200 level or above excluding Math 320.	5
Science	30-50
Complete one of the approved minors in	
Biological Science	30
Chemistry	36
Earth Science	38
Physics	31
General Science	48-50

Methods Courses	8-9
MATH 320 Teaching Math Sec. Sch.	5
OR	
EDSE 478 Teaching Physical Sci.	3
OR	
BOT 368 Teaching of Biology	4

NOTE: Students who complete this program will receive certification to teach mathematics or the selected science in grades 7-12.

Persons interested in teaching in middle school in subjects other than language arts/social studies or mathematics/science please contact the Student Personnel Services Office, 124 McCracken Hall.

REMINDER: All Students pursuing teacher education programs at Ohio University are subject to the Selective Admission and Retention Program in teacher education. Criteria and procedures are available in the Student Personnel Services Office, 124 McCracken Hall.

NOTE: Students exempt from both freshman and junior English composition requirements must still complete a minimum of five hours of English.

Secondary Certification with Language Arts/Social Studies Emphasis

Professional Requirements

(43-47)

EDCI 275 Lrng. Proc. in the Classrm.	5
OR	
PSY 275 Educational Psych.	4
EDSE 250 Analysis of Tchr. Char. & Teaching Tasks	4
EDSE 250L Field Experience	2
EDSE 270 Studies of the Learner: Development & Exceptionalities	3

EDSE 270L Field Experience	1
EDSE 351 Instruc. Proc. & Curr.	5
Methods in Major Field	3-6
(If a methods professor does not require and certify 30 clock hours of field, laboratory, and clinical experience, students must also register for EDPL 360, Field Experience in Elementary or Secondary Schools, to obtain the required field contact hours.)	
EDM 480A Intro. to Educ. Media	2
EDCI 401 Advanced Field Experience-Urban	2
EDSE 420 Teaching Reading in the Content Areas	4
EDSE 420L Field Experience	1
EDCI 461 Intro to Individualization of Education	4
EDCI 492M Middle School Education	5
EDCI 480 Teacher, School, and Society	3

EDM 332, Microcomputer Applications in Education, is highly recommended as an elective.

Professional Laboratory Experience

EDPL 463-464 Student Teaching in Middle School	13
(EDPL 461 may be substituted for EDPL 464 where appropriate.)	
EDPL 465 Student Teaching Seminar	3

These three courses are taken concurrently in one quarter and constitute the student teaching requirement. A person should make an application for student teaching by December 1 of the year prior to the year in which student teaching is to be done. For example, anyone doing student teaching during any of the three quarters of the school year 1985-86 should apply by December 1, 1984. For further information contact the Field Experience Office.

Required General Education Courses

All students in secondary academic or special fields in teacher education (except home economics education) must complete 45 hours of general education courses in order to be eligible for graduation with a B.S.Ed. degree or teacher certification or both.

Students must also complete Ohio University's General Education Program (see General Education Requirement in the *Graduation Requirements* section of this catalog) and are urged to consult with their advisor to plan to meet both sets of general education requirements.

The breakdown of these general education course requirements is as follows:

Science & Mathematics.

Each student is required to complete at least one course in science and one course in mathematics. Appropriate science courses are: astronomy, chemistry, physics, botany, zoological and biomedical sciences, physical science, geological sciences, and PSY 226, 312, and 314. Any course in the mathematics department except 011, 032, 101, 109A, 109B, 320, or 420 is acceptable for the mathematics requirement. Also, PSY 121 counts toward the mathematics requirement. Computer science courses do not satisfy this requirement.

Comparative Arts and/or Philosophy

Each student is required to complete at least two courses in this area. The two courses need not be in one field. Possibilities include any courses in the Philosophy Department; Comparative Arts Department; HUM 107, 108, 109, 307, 308, and 309; theater history courses; Art History Department; Art Department except for ART 360, 460, 461, 462; School of Music courses except for music education courses, music therapy courses, and the one- or two-hour participation courses.

Social Studies.

Each student is required to complete at least two courses in social science. The two courses need not be in the same field. PSY 101, which is required, is included as one of the social science courses. Other possibilities include any course in anthropology, economics, economic education, history, political science, sociology, social work, geography, and psychology, EXCEPT PSY 275, 121, 226, 312, & 314.

English and/or Foreign Language.

Each student is required to complete at least two courses in English and/or foreign language. Freshman and junior English composition courses taken to satisfy the University En-

glish composition requirement (See English Composition Requirement in the *Graduation Requirements* section of this catalog) may be used toward completion of these hours. The two courses need not be in the same field. INCO 103 is a specific requirement in this area and is counted as one of the two courses needed. Possibilities in this area include all English courses EXCEPT ENG 450A and 450B; any linguistics courses; any foreign language courses EXCEPT ML 410 and 445; HUM 107, 108, 109, 307, 308, and 309 (these humanities courses may NOT count toward the general education course requirements in both the English and/or foreign language field AND the comparative arts and/or philosophy field).

If two courses in each of the above fields do not add up to a total of 45 hours, then a student must elect sufficient hours in one or a combination of the above areas to bring the total hours in general education courses to 45 hours.

If a student's major OR second teaching field is the same as one of the above areas, then ten hours of the major or minor may be counted toward the corresponding general education field as well as the major or minor. For example: If the student's major is English, ten hours of English may count toward the 45-hour total of general education courses and toward Field 4, above, which is English and/or Foreign Language.

No more than six hours of HPES activity courses may be counted toward the degree except for majors or minors in physical education, and none may count in general education.

Major Requirements

Option I

Language Arts	46
ENG 200 Intro to Literature	4
ENG 312 Medieval & Renais. Eng. Lit.	5
ENG 313 Restoration & Neo-Classical	5
ENG 314 Romantic & Victorian Lit.	5
ENG 307 Structure of Amer. Eng.	5
ENG 308 Advanced Composition	4
ENG 322 Amer. Lit. Since Civil War	5
ENG 361 Major Authors—American	4
OR	
ENG 362 Major Authors—International	4
ENG 460 Literary Genres	4
EDEL 310 Tchng. Lang. Arts Elem. Sch.	3
EDEL 310L Lang. Arts/Field-Clinical	2

Methods Courses	6
ENG 450A Teaching Lang. & Comp. (fall qtr. only)	3
ENG 450B Teaching Literature (winter qtr. only)	3

Social Studies	32
Select two of the following:	
HIST 101, 102, 103 West. Civ.	8
Select two of the following:	
HIST 211, 212, 213 U.S. History	8
Select 16 additional hours in one of the following areas: political science, economics, geography, sociology, anthropology.	
NOTE: Students who complete this option receive certification to teach English in grades 7-12.	

Option II

Social Studies	33-51
Complete the approved minor in one of the following areas:	
History	48
Sociology & Anthropology	30
Political science	30
Geography	30
Plus EDSE 479 Teaching Social Science in Jr./Sr. High School	3

Language Arts	
EDEL 310 Tchng. Lang. Arts Elem. Sch.	3
EDEL 310L Lang. Arts/Field-Clinical	2
Plus coursework from the approved minor in English to bring the total hours in the areas of emphasis to 45 (30-48 hours).	

NOTE: Persons who complete this option receive certification to teach the particular social science selected in grades 7-12.

Persons interested in teaching in middle school in subjects other than language arts/social studies or mathematics/science please contact the Student Personnel Services Office, 124 McCracken Hall.

Reminder: All students pursuing teacher education programs at Ohio University are subject to the Selective Admission and Retention Program in teacher education. Criteria and procedures are available in the Student Personnel Services Office, 124 McCracken Hall.

SECONDARY EDUCATION PROGRAMS

Professional Requirements (35-38 hours)

EDCI 275 Learning Process in the Classroom	5
OR	
PSY 275—Educational Psych.	4
EDSE 250 Analysis of Teacher Characteristics and Teaching Tasks	4
EDSE 250L Field Experience	2
EDSE 270 Studies of the Learner: Devel. & Exceptionalities	3
EDSE 270L Field Experience	1
EDSE 351 Instruc. Proc. & Curriculum	5
Methods in Major Field	3-6
(If a methods professor does not require and certify 30 clock hours of field, laboratory, and clinical experience, students must also register for EDPL 360, Field Experience in Elementary or Secondary Schools, to obtain the required field contact hours.)	
EDM 480A Intro. to Educational Media	2
EDCI 401 Advanced Field Experience-Urban	2
EDSE 420 Teaching Reading in the Content Areas	4
EDSE 420L Field Experience	1
EDCI 480 Teacher, School, and Society	3
EDM 332, Microcomputer Applications in Education, is highly recommended as an elective.	

Students are urged strongly to preregister for their professional courses so that proper field experience placements in their major area can be identified ahead of time. Students seeking to add L (field experience) courses after a quarter begins may be required to wait until a field placement is open.

Professional Laboratory Experience

EDPL 463 and 464 Stu. Tchng. in Second. Schools (EDPL 461 may be substituted for EDPL 464 where appropriate)	13
EDPL 465 Stu. Tchng. Seminar	3

These three courses are taken concurrently in one quarter and constitute the student teaching requirement. A person should make an application for student teaching by December 1 of the year prior to the year in which student teaching is to be done. For example, anyone doing student teaching during any of the three quarters of the school year 1985-86 should apply by December 1, 1984. For further information contact the Field Experience Office.

Required General Education Courses

All students in secondary academic or special fields in teacher education (except home economics education) must complete 45 hours of general education courses in order to be eligible for graduation with a B.S.Ed. degree or teacher certification or both.

Students must also complete Ohio University's General Education Program (see General Education Requirement in the *Graduation Requirements* section of this catalog)

and are urged to consult with their advisors to plan to meet both sets of general education requirements.

The breakdown of these general education course requirements is as follows:

Science and Mathematics

Each student is required to complete at least one course in science and one course in mathematics. Appropriate science courses are: astronomy, chemistry, physics, botany, zoological and biomedical sciences, physical science, geological sciences, and PSY 226, 312, and 314. Any course in the mathematics department except 011, 032, 101, 109A, 109B, 320, or 420 is acceptable for the mathematics requirement. Also, PSY 121 counts toward the mathematics requirement. Computer science courses do not satisfy this requirement.

Comparative Arts and/or Philosophy

Each student is required to complete at least two courses in this area. The two courses need not be in one field. Possibilities include any courses in the Philosophy Department; Comparative Arts Department; HUM 107, 108, 109, 307, 308, and 309; theater history courses; Art History Department; Art Department except for ART 360, 460, 461, 462; School of Music courses except for music education courses, music therapy courses, and the one- or two-hour participation courses.

Social Studies

Each student is required to complete at least two courses in social science. The two courses need not be in the same field. PSY 101, which is required, is included as one of the social science courses. Other possibilities include any course in anthropology, economics, economic education, history, political science, sociology, social work, geography, and psychology, EXCEPT PSY 275, 121, 226, 312, and 314.

English and/or Foreign Language

Each student is required to complete at least two courses in English and/or foreign language. Freshman and junior English composition courses taken to satisfy the University English composition requirement (See English Composition Requirement in the *Graduation Requirements* section of this catalog) may be used toward completion of these hours. The two courses need not be in the same field. INCO 103 is a specific requirement in this area and is counted as one of the two courses needed. Possibilities in this area include all English courses EXCEPT ENG 450A and 450B; any linguistics courses; any foreign language courses EXCEPT ML 410 and 445; HUM 107, 108, 109, 307, 308, and 309 (these humanities courses may NOT count toward the general education course requirements in both the English and/or foreign language field AND the comparative arts and/or philosophy field.)

If two courses in each of the above fields do not add up to a total of 45 hours, then a student must elect sufficient hours in one or a combination of the above areas to bring the total hours in general education courses to 45 hours.

If a student's major OR second teaching field is the same as one of the above areas, then ten hours of the major or minor may be counted toward the corresponding general education field as well as the major or minor. For example: if the student's major is English, ten hours of English may count toward the 45-hour total of general education courses and toward Field 4, above, which is English and/or Foreign Language.

No more than six hours of HPES activity courses may be counted toward the degree except for majors or minors in physical education and recreation, and none may count in general education.

Major Requirements

Art Education

Regardless of the college of the University from which a student graduates, if he or she wishes to be certified through Ohio University to teach art, the following program must be completed. The certificate for which this program prepares a person is a four-year provisional special field certificate in art which allows the holder to teach

in grades kindergarten through 12, inclusive.

Majors are required to submit portfolios of studio work in May of the sophomore year.

Methods Courses:

ART 461 Art Exper. in Elem. School	3
ART 462 Tchng. in the Second. School	3

Major Requirements: 100

Select at least 76 quarter hours of studio courses including at least one course from each of the following three areas:

Two-dimensional art

Possibilities include courses in 2-D design, painting, prints, fibers, drawing, photography, and graphic design.

Three-dimensional art

Possibilities include courses in 3-D design, ceramics, sculpture, fibers, glass, relief prints, and silk screen.

Graphic communications

ART 151, 251, 254

Note that although a course may be counted in more than one area, a single course may not be used to fulfill more than one requirement. Art education courses (ART 360, 460, 461, 462) do not count toward any of the above areas.

Select 24 quarter hours of art history and/or comparative arts.

Possibilities include any courses in the art history or comparative arts departments (except CA 270, 271, 272; 321, 322, 323; 470, 471, 472, 473, 474, 475, 476, 477).

Biological Sciences

A student may earn either a B.S.Ed. in the College of Education or an A.B. or B.S. in botany or zoology in the College of Arts and Sciences and meet the teacher certification requirements. Regardless of the college of the University from which a student graduates, if he or she wishes to be certified through Ohio University to teach biology as the major field, the following program must be completed. The certificate for which this program prepares a person is a four-year provisional high school certificate which qualifies the holder to teach biology in grades 7 through 12, inclusive.

Students are strongly urged to complete a second teaching field preferably in another science or in mathematics. Because of tool courses required in the major, the hours needed to complete a minor in math or the other science fields are approximately: Math — 20-25 hours, chemistry — 20 hours, earth science — 35 hours, general science — 12 hours, physics — 23 hours. Program sheets detailing specific course requirements in these minors are available in the Student Personnel Services Office, McCracken Hall.

Methods Course:

BOT 368 Tchng. of Biol.	4
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Major Requirements: 78-80

Tool Courses (32-34)

CHEM 141, 142, 301, 302	16
MATH 163A and B or 263A and B	8-10
PHYS 201, 202	8

Required Courses (18)

ZOOL 150 OR BOT 110	6
BOT 111	6
ZOOL 151	6

Select one botany course and one zoological or biomedical science course from each of the following four areas and any additional biology electives if needed to complete 30 quarter hours.

Structure of Organisms

BOT 307 Biol. of Algae & Mosses	6
BOT 308 Morph. of Vascular Plants	6
BOT 312 Plant Anat.	5
ZOOL 301 Human Anat.	6
ZOOL 303 Compar. Vertebrate Anat.	6

ZOOL 408 Histology	6
ZOOL 430 Invertebrate Zool.	6
ZOOL 435 Gen. Entomology	6
ZOOL 441 Parasitology	6
Regulation and Maintenance of Organisms	
BOT 424 Plant Physiology	6
BOT 431 Cell Biology	5
ZOOL 325 Gen. Genetics	5
ZOOL 345 Human Physiology	4
ZOOL 437 Medical Entomology	4
ZOOL 448 Cell Physiology	4
ZOOL 450 Prin. of Endocrinology	4
ZOOL 460 Animal Physiology	4
ZOOL 463 Cell Chem.	4
ZOOL 473 Animal Behavior	5
Continuity and Variation in Organisms	
BOT 248 Trees & Shrubs	5
BOT 309 Plant Syst. & Ohio Flora	5
BOT 310 Biol. of Fungi	5
BOT 420 Fresh-water Algae	5
ZOOL 271 Ornithology	2
ZOOL 429 Marine Biol.	5
ZOOL 431 Limnology	4
ZOOL 432 Field Hydrobiology	3
ZOOL 439 Field Entomology	5
ZOOL 442 Helminthology	6
ZOOL 472 Herpetology	5
ZOOL 474 Mammalogy	6
ZOOL 479 Evolution	4
Diversity and Interrelationships	
BOT 247 Vegetation of North Am.	4
BOT 311 Biol. & Human Affairs	3
BOT 425 Ecology	5
ZOOL 390 Biol. & Future of Man	5
ZOOL 375 Animal Ecology	3
ZOOL 376 Ecology Lab.	3
ZOOL 477 Population Ecology	4
ZOOL 478 Population Ecology Lab.	3

Bookkeeping — Basic Business

Regardless of the college of the University from which a student graduates, if he or she wishes to be certified through Ohio University to teach bookkeeping-basic business, the following program must be completed. The certificate for which this program prepares a person is a four-year provisional high school certificate which qualifies the holder to teach bookkeeping-basic business and sales-communication in grades 7 through 12, inclusive.

Methods Course:

EDSE 470 Tchng. of Bookkeeping-Basic Bus.	3
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Major Requirements: 70

ACCT 201 and 202 Financial and Managerial	8
ACCT 203 Acct. Prin. & Proc.	4
OR	
ACCT 311 Ind. Acct.	4
BUSL 255, 356 Law & Society, Law of the Mgt. Proc.	8
ECON 101 and 102 Prin.	8
GEOG 130 Econ. Geog.	4
OR	
GEOG 331 Geog. of Agric. Activity	4
JOUR 250 Adv. Prin.	5
MKT 302 Mkt. Prin.	4
MKT 458 Sales Mgt.	4
OR	
MKT 444 Consumer Behavior	4
FIN 325 Managerial Finance	4
MGT 300 Mgt.	4
MGT 325 Comm. Behavior in Mod. Organization	4
CSB 200 Intro. to Bus. Comp.	4
CSB 330 COBOL Program.	4
Elective in business	8-4

Chemistry

A student may earn a B.S.Ed. in the College of Education or an A.B. or B.S. in chemistry in the College of Arts

and Sciences and meet teacher certification requirements. Regardless of the college of the University from which a student graduates, if he or she wishes to be certified through Ohio University to teach chemistry as the major field at least the following program must be completed. The certificate for which this program prepares a person is a four-year provisional high school certificate which qualifies the holder to teach chemistry in grades 7 through 12, inclusive.

Students are strongly urged to complete a second teaching field preferably in another science or in mathematics. The hours required to complete a minor in math or the other science fields are approximately: Math — 20-25 hours, biology — 32 hours, earth science — 35 hours, general science — 18 hours, physics — 21-23 hours. Program sheets detailing specific course requirements in these minors are available in the Student Personnel Services Office, McCracken Hall.

Methods Course:

EDSE 478 Teaching of Physical Science 3

Major Requirements: 65-77

Tool Courses (21-25)

MATH 163A and B OR 263A and B 8-10
 PHYS 201 and 202 OR 251 and 252 8-10
 BOT 110 OR ZOOL 150 Intro. 6

Chemistry Courses (44-46)

CHEM 141, 142, 143 15
 CHEM 301, 302, 303, 304* Organic 11
 OR
 CHEM 305, 306, 307, 308, 309 Organic 15
 CHEM 325* Instrumental Methods of Analys. 4
 OR
 CHEM 484 and 495 Electrochem. &
 Spectrochem. Analys. 10
 CHEM 351* Phys. 5
 OR
 CHEM 453, 454, 455 Phys. 9
 CHEM 476 Mod. Inorganic 4
 CHEM 489 Basic Biochem 4

*Student must choose one of the long sequences in organic, instrumental, or physical chemistry. Choosing the long sequence in physical chemistry will require more math and more physics than listed as tools for this major.

Communications Comprehensive — Option One (Speech Emphasis)

Regardless of the college of the University from which a student graduates, if he or she wishes to be certified through Ohio University to teach in communication with an emphasis in speech, the following program must be completed. The certificate for which this program prepares a person is a four-year provisional high school certificate which qualifies the holder to teach English, speech, journalism, reading, and an integrated communications course in grades 7 through 12, inclusive.

Methods Course:

INCO 421 Instructional Training
 and Devel. in Comm. 5

Major Requirements: 88

Speech (41)

Fundamental Processes
 INCO 101* Fund. of Human Comm. 3
 INCO 245* Intro. to Org. Comm. 4
 And five quarter hours of electives selected from:
 INCO 107 Intro. to Verbal Lang. Behavior 2
 INCO 104 Listening 2
 INCO 433 Applic. of Gen. Semantics 4
 INCO 448 Cross-Cultural Comm. 4

Theory and History of Speech

INCO 234* Intro. to Comm. Theory 5
 INCO 353A*, or B, or C Hist. & Crit. Oratory 3

And eight quarter hours of electives selected from:

INCO 217 Forensic Wrkshp. 1-6
 INCO 425 Dir. Forensic Program 3
 INCO 435 Theories of Argument 3
 INCO 342 Comm. & Persuasion 4
 INCO 446 Comm. & Campaign 5
 INCO 452 Psych. of Speech 4
 INCO 450 Intro. to Rhetorical Theory 3
 INCO 458 Responsibilities & Freedom of Speech 4
 INCO 465 Field Research Meth. 5
 TCOM 270 Telecom. & Pub. 4
 TCOM 441 Instruct. Telecom. 4
 THAR 210 Acting I 4
 THAR 270 or 271 or 272 Theater Hist. 3
 THAR 320 Dir. I 4

Forms of Speech

INCO 105* or TCOM 105 or
 JOUR 105 Intro. to Mass Commun. 4
 INCO 220* Oral Interp. of Lit. 4
 And 7 hours selected from at least 3 of the 6 areas:

Platform Speaking

INCO 103 Pub. Spkng. 4
 INCO 212 Message Prep. 4

Discussion

INCO 205 Group Discussion 4
 INCO 210 Parliamentary Proced. 2
 INCO 404 Interviewing 4
 INCO 405 Conference Leadership 4

Debate

INCO 215 Argumentation & Debate 4

Acting

THAR 210, 211, 212 Acting I, II, III 4,4,4
 THAR 441 Creative Dramatics 3

Playdirecting

THAR 465 Practi. in Dir. 2-4

Technical Theater

THAR 427 Practi. in Stage Mgt. 2-4
 THAR 135, 235, 335, 435 Practi. in
 Prod. Design 2-4

English (27 hours)

ENG 200 Intro. to Lit. 4
 ENG 307 Struc. of Am. Engl. 5
 ENG 308 Adv. Comp. 4

Select one of the following (4-5 hours):

ENG 301 Shakespeare: Histories
 ENG 302 Shakespeare: Comedies
 ENG 303 Shakespeare: Tragedies
 ENG 312 Medieval & Renaissance Engl. Lit.
 ENG 313 Restoration & Neo-Classical Engl. Lit.
 ENG 314 Romantic & Victorian Lit.
 ENG 360 Major Authors: Engl.

Select one of the following (4-5 hours):

ENG 317A, B, C Am. Lit. by Black Authors
 ENG 321 Am. Lit. to Civil War
 ENG 322 Am. Lit. Since Civil War
 ENG 361 Major Authors: Am.

Select one of the following (3-5 hours):

HUM 307, 308, 309 Great Books
 ENG 204 Internat. Lit.: Classical
 ENG 205 Internat. Lit.: Romantic
 ENG 206 Internat. Lit.: Modern
 ENG 306A, B, C Oriental Lit.

Select sufficient hours of English courses at the 200 level or above to bring total to 27 quarter hours:

Journalism (15-17)

JOUR 231 News Rptng. 4
 JOUR 333 News Edit. 4
 JOUR 484 or 485 Sup. Schl. Pub. 4

Select one of the following (3-5):

JOUR 221 Graphics of Comm. 5
 JOUR 331 Rptng. Contemp. Issues 3
 JOUR 441J Mag. Feature Wrtnng. 4

Reading (9 hours)

EDEL 411 Diagnosis & Treatment of Reading
 Disabilities 4
 EDSE 420 Tchng. Reading in Content Areas 4
 EDSE 420L Field Exp. 1

*Required

Communications Comprehensive — Option Two (English Emphasis)

Regardless of the college of the University from which a student graduates, if he or she wishes to be certified through Ohio University to teach in the field of communications with an emphasis in English, the following program must be completed. The certificate for which this program prepares a person is a four-year provisional high school certificate which qualifies the holder to teach English, speech, journalism, reading, and an integrated communications course in grades 7 through 12, inclusive.

Methods Courses:

ENG 450A Tchng. Lang. & Comp.	3
ENG 450B Tchng. Lit.	3

Major Requirements: 94

English (41)

ENG 200 Intro. to Lit.	4
ENG 312 Medieval & Renaissance Engl. Lit.	5
ENG 313 Restoration & Neo-Classical	5
ENG 314 Romantic & Victorian Lit.	5
ENG 307 Struct. of Am. Engl.	5
ENG 308 Adv. Comp.	4
ENG 322 Am. Lit. Since Civil War	5
Select one of the following	4
ENG 361 Major Authors: Am.	
ENG 362 Major Authors: Internat.	
ENG 460 Literary Genres	4

Speech (29 hours)

INCO 101* Speech Fundamentals	3
INCO 245* Intro. to Org. Comm.	4
Theory & Hist. of Speech	
INCO 234* Intro. to Comm. Theory	5
INCO 353*A, or B, or C Hist. & Crit. of Oratory	3
Forms of Speech	
INCO 105* or TCOM 105 or	
JOUR 105 Intro. to Mass Comm.	4
INCO 220* Oral Interp. of Lit.	4
Eight hrs. of electives selected from:	
INCO 103 Pub. Spkng.	4
INCO 205 Group Discussion	4
INCO 215 Argumentation & Debate	4

Journalism (15-17)

JOUR 231 News Rptng.	4
JOUR 333 News Edit.	4
JOUR 484 or 485 Sup. Schol. Pub.	4
Select one of the following (3-5):	
JOUR 221 Graphics of Comm.	5
JOUR 331 Rptng. Contemp. Issues	3
JOUR 441J Mag. Feature Wrtng.	4

Reading (9)

EDEL 411 Diagnosis & Treatment of Reading	
Disabilities	4
EDSE 420 Tchng. Reading in Content Areas	4
EDSE 420L Field Exp.	1

*Required

Comprehensive Business Education

Regardless of the college of the University from which a student graduates, if he or she wishes to be certified through Ohio University to teach business education, the following program must be completed. The certificate for which this program prepares a person is a four-year provisional high school certificate which qualifies the holder to teach business education in grades 7 through 12, inclusive.

Methods Course:

EDSE 470 Tchng. of Bookkeeping-Basic Bus.	3
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Major Requirements: 92-95

Typewriting and Office Procedures (42-46)

GST 121, 122, 123 Typewriting Courses*	8
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GST 111, 112, 113, 241G, 242G, Shorthand

Courses*	15
GST 231 Office Machines*	3
GST 171G Office Methods & Proced.*	3
GST 262 Report & Letter Wrtng.*	4
CSB 200 Intro. to Bus. Comp.	
and CSB 330 COBOL Prog.	8
MGT 325 Comm. Behavior in Mod. Organization	4

Business and Economics (40)

ACCT 201 Financial Acct.	4
ACCT 202 Managerial Acct.	4
ACCT 203 Acct. Prin. & Proced.	4
OR	
ACCT 311 Ind. Acct.	4
BUSL 255 Law & Society	4
BUSL 356 Law of Mgt. Proc.	4
ECON 101 Prin.	4
ECON 102 Prin.	4
MKT 302 Mkt. Prin.	4
MGT 300 Mgt.	4
FIN 325 Managerial Fin.	4

Electives in Business and Related Areas (10)

Select 10 quarter hours of electives from the following:	
JOUR 250 Advert. Prin.	5
MKT 444 Consumer Behavior	4
MKT 458 Sales Mgt.	4
GEOG 130, or 331, or 332	4
MATH 163A Intro. to Calculus	5
MATH 250B Finite Math	5
Accounting courses	
Economics courses	

*Ohio University does not offer courses in these areas except on the Chillicothe and Lancaster campuses. Students following this major must take these courses at the Chillicothe and Lancaster campuses or at another institution. Courses could be taken at a four-year accredited institution or at certain technical institutions. Any courses taken to fulfill these requirements should be approved by the Student Personnel Services Office in the College of Education to ensure applicability toward certification.

Earth Science

A student may earn a B.S.Ed. in the College of Education or an A.B. or B.S. in geological sciences or geography in the College of Arts and Sciences and meet teacher certification requirements. Regardless of the college of the University from which a student graduates, if he or she wishes to be certified through Ohio University to teach earth science as a major field, the following program must be completed. The certificate for which this program prepares a person is a four-year provisional high school certificate which qualifies the holder to teach earth science in grades 7 through 12, inclusive.

Students are strongly urged to complete a second teaching field, preferably in another science or mathematics. The hours required to complete a minor in math or the other science fields are approximately: Math — 30 hours, biology — 22 hours, chemistry — 26 hours, general science — none, physics — 23 hours. Program sheets detailing specific course requirements in these minors are available in the Student Personnel Services Office, McCracken Hall.

Methods Course:

EDSE 472 Tchng. of Earth Science	3
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Tool Courses (30)

CHEM 121, 122, 123	12
PHYS 201, 202	8
BOT 110 OR ZOOL 150 Intro.	6
BOT 111 OR ZOOL 151 Intro.	6

Earth Science Courses (51)

GEOG 101 Phys. Geog.	5
GEOG 201 Environment & Man	4
GEOG 311 Elements of Meteorology	5
GEOG 312 Climate	5

PSC 100B Universe	4
OR	
PHYS 211 Universe	3
ASTR 300 Solar System	3
GEOL 101 Intro. to Geol.	5
GEOL 211 Intro. to Oceanography	4
GEOL 310 Rocks & Minerals	5
GEOL 256 Historic	4
GEOL 330 Prin. of Geomorphology	5
GEOL 360 Struct. Geol.	4

Educational Media Programs

The Educational Media Academic Area provides two undergraduate majors and two undergraduate minors. One of the majors is designed to prepare media specialists to work in the public schools. Upon completion of this program, students become eligible for teacher certification as media specialists, grades K-12. The other major prepares media personnel to work in business/industry, the health sciences, and higher education nonteaching capacities. Both minors are designed to prepare media specialists to work in the public schools, one in grades K-8, the other in grades 7-12. Upon completion of either minor, the student becomes eligible for teacher certification as a media specialist.

Certificated Media Major

Methods Course:

EDM 489 Organization and Administration of Ed. Media Prog.	5
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Major Requirements:

Required Core Courses

EDM 201 Use of Library Media Resources I	3
EDM 289 Sophomore Practicum	2
EDM 304 Acquisition and Preserv. of Mats.	3
EDM 305 Use of Library Media Resources II	3
EDM 389 Junior Practicum	2
EDM 403 Basic Catalog. and Class.	5
EDM 404 Basic Catalog. Non-print Mats.	4
EDM 480 Intro. to Ednl. Media	4
EDM 481 Fund. of Instruct. Design and Devel. Media Emph.	4
EDM 482 Product. of Instruct. Mats.	4
EDM 483 Select. & Eval. of Mats.	4

Required Courses

EDEL 200 Studies of Children	4
OR	
HECF 160 Intro. to Child Devel.	4
EDEL 321 Children's Lit.	4
EDM 301 Library Serv. to Children	4
EDM 302 Adoles. Mats. and Serv.	4
EDM 303 Tchng. Library Skills K-12	3

Select 8 quarter hours from the following:

ART 151 Intro. to Graphic Design	4
ART 191 Intro. to Photog.	4
TCOM 200A, B, C Telecommunications Wrting. & Prod. Planning, Audio Prod. I, Video Prod. I	2,2,2
TCOM 441 Instructional Telecommunications	4
EDCI 461 Intro. to Individualiz. of Instruct.	4

Select 6 quarter hours from the following:

INCO 105 Intro. to Mass Comm.	4
CS 120 Computer Science Survey	5
EDSP 271 Intro. to Ed. of Except. Child. & Youth	3
EDEL 310 Teach. Lang. Arts Elem. Sch.	3
EDEL 310L Field/Clinical Exper.	2
EDEL 311 Teach. Read. Elem. Sch.	4
EDEL 311L Field/Clinical Exper.	1
INCO 234 Intro. to Comm. Theory	4
EDM 490 Study in Ednl. Media (Max. 15)	1-5

Students must complete second teaching field

Noncertificated Media Major

All students pursuing this program must complete 32

quarter hours in a related area. The related area includes coursework, internship, or both in the environment in which the student has elected to seek employment. The specific courses are to be determined with the student's advisor and then placed on file in the student's folder in the Student Personnel Services Office, McCracken Hall.

Required Core Courses:

EDM 201 Use of Library Media Resources I	3
EDM 289 Sophomore Practicum	2
EDM 304 Acquisition and Preserv. of Mats.	3
EDM 305 Use of Library Media Resources II	3
EDM 389 Junior Practicum	2
EDM 403 Basic Catalog. & Class.	5
EDM 404 Basic Catalog. Non-print Mats.	4
EDM 480 Intro. to Ednl. Media	4
EDM 481 Fund. of Instruct. Design and Devel.:	
Media Emph.	4
EDM 482 Product of Instruct. Mats.	4
EDM 483 Select. & Eval. of Mats.	4

Required Courses:

INCO 105 Intro. to Mass Comm.	4
INCO 234 Intro. to Comm. Theory	5
CS 120 Computer Science Survey	5
ART 151 Intro. to Graphic Design	4
ART 191 Intro. to Photography	4
ART 192 Basic Photography	4
TCOM 200A, B, C Telecommunications Wrting. & Prod. Planning, Audio Prod. I, Video Prod. I	2,2,2
TCOM 441 Instructional Telecommunications	4
IT 244 Graphic Processes	3
EDCI 461 Intro. to Individualiz. of Instruct.	4
EDM 489 Organiz. & Admin. of Ednl. Media Progs.	5

English Comprehensive

Regardless of the college of the University from which a student graduates, if he or she wishes to be certified through Ohio University to teach English, the following program must be completed. The certificate for which this program prepares a person is a four-year provisional high school certificate which qualifies the holder to teach English in grades 7 through 12, inclusive.

Methods Courses:

ENG 450A Tchng. Lang. & Comp.	3
ENG 450B Tchng. Lit.	3

Major Requirements: 62-66

ENG 200 Intro. to Lit.	4
Select one of the following	5
ENG 301 Shakespeare: Histories	
ENG 302 Shakespeare: Comedies	
ENG 303 Shakespeare: Tragedies	
Select two of the following	8-10
ENG 307 Struct. of Am. Engl.	
ENG 350 Tradit. Grammar, Mechanics, & Usage	
ENG 351 Hist. of Engl. Lang.	
ENG 352 Devel. of Am. Engl.	
ENG 308 Adv. Comp.	4
ENG 312 Medieval & Renaissance Engl. Lit.	5
ENG 313 Restoration & Neo-Classical Engl. Lit.	5
ENG 314 Romantic & Victorian Lit.	5
ENG 322 Am. Lit. Since Civil War	5
Select one of the following	5
ENG 321 Am. Lit. to Civil War	
ENG 317A, B, or C Am. Lit. by Black Authors	
ENG 331 20th Cent. Brit. & Am. Lit.	
Select one of the following	4
ENG 361 Major Authors: Am.	
ENG 362 Major Authors: Internat.	
ENG 460 Lit. Genres	4
Select one of the following	3-5
HUM 307, 308, 309 Great Books	
ENG 204 Internat. Lit.: Classical	
ENG 205 Internat. Lit.: Romantic	
ENG 206 Internat. Lit.: Modern	
ENG 306A,B,C Oriental Lit.	

EDSE 420 Tchng. Reading in Jr. & Sr. H.S.	4
EDSE 420L Field Exp.	1

Family Life Education

Regardless of the college of the University from which a student graduates, if he or she wishes to be certified through Ohio University to teach family life education, the following program must be completed. The certificate for which this program prepares a person is a four-year provisional high school certificate which qualifies the holder to teach an integrated family-life education course in grades 7 through 12, inclusive.

Methods Course:

HEED 340 Tchng. of Home Econ.	4
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Major Requirements: 90

Psychology: 8

HECF 160 Intro. to Child Devel.	4
PSY 336 Social Psych.	4

Biology: 7

ZOOL 345 Human Physiology	4
HLTH 204C Drug, Alcohol & Tobacco Educ.	3

Health: 21

HEFN 128 Intro. to Nutrition	3
HREC 250C Recreation	3
HLTH 370 Community Health Programs	4
HLTH 380 Safety Educ.	4
HLTH 227 First Aid	3
HLTH 202 Personal & Community Health	4

Sociology: 4

Select one of the following:	
SOC 220 Intro. to Family Sociology	4
SOC 201 Social Problems	4

Marriage and the Family: 19

HECF 370 Family Living	3
HECF 371 Family Devel.	3
HECF 471 Family Life Educ.	4
HECF 462 Readings in Child Devel. &/or	
Family Living	6

HECF 360 Human Sexuality	3
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Household Management: 12

Select 12 hrs. from the following:	
HEFN 222 Food Science & Prin.	4
HECE 395 Home Mgt.	3
HEID 180 Furnishing Today's Home	3
HEID 384 Family Housing	3
HETC 117 Textiles & Dress in the Environment	3

Consumer Economics: 7

HECE 390 Family Consumer Econ.	3
ECED 447 Econ. Analys.	4

Select 12 qtr. hours from any one or	
combination of the above fields	12

General Speech — Option One (INCO Emphasis)

Regardless of the college of the University from which a student graduates, if he or she wishes to be certified through Ohio University to teach speech with an interpersonal communication emphasis, the following program must be completed. The certificate for which this program prepares a person is a four-year provisional high school certificate which qualifies the holder to teach speech in grades 7 through 12, inclusive.

Methods Course:

INCO 421 Instructional Train. & Devel. in Comm.	5
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Major Requirements: 57

Fundamental Processes (13)

INCO 101* Speech Fundamentals	3
INCO 245* Intro. to Org. Comm.	4

And 6 qtr hrs of electives selected from:

INCO 104 Listening	2
INCO 107 Intro. to Verbal Lang. Behavior	2
INCO 433 Applic. of Gen. Semantics	4
INCO 448 Cross-cultural Comm.	4

Theory and History of Speech (21)

INCO 234* Intro. to Comm. Theory	5
INCO 353A*, B, or C Hist. & Crit. of Oratory	3
And 17 qtr hrs. of electives from:	
INCO 217 Forensic Wkshp.	1-6
INCO 425 Dir. Forensic Program	3
INCO 435 Theories of Argument	3
INCO 342 Comm. & Persuasion	4
INCO 446 Comm. & Campaign	5
INCO 450 Intro. to Rhetorical Theory	3
INCO 452 Psych. of Speech	4
INCO 458 Responsibilities & Freedom of Speech	4
INCO 465 Field Research Meth.	5
TCOM 270 Telecommunications & the Public	4
TCOM 441 Instructional Telecommunications	4
THAR 210 Prin. of Acting	4
THAR 270 or 271 or 272 Theater Hist.	3
THAR 320 Dir. I	4

Forms of Speech (23)

INCO, TCOM, JOUR 105* Intro. to Mass Comm.	4
INCO 220* Oral Interp. of Lit.	4
And 16 qtr. hrs of electives from 3 of the 6 areas:	

Platform Speaking

INCO 103 Pub. Spkng.	4
INCO 212 Message Prep.	4

Discussion

INCO 205 Group Discussion	4
INCO 210 Parliamentary Proc.	2
INCO 404 Interviewing	4
INCO 405 Conference Leadership	4

Debate

INCO 215 Argumentation & Debate	4
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Acting

THAR 210, 211, 212 Acting I, II, III	4,4,4
THAR 441 Creative Dramatics	3

Playdirecting

THAR 465 Practicum in Dir.	2-4
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Technical Theater

THAR 427 Practicum in Stage Mgt.	2-4
THAR 135, 235, 335, 435 Practicum in	
Prod. Design	2-4

*Required

General Speech — Option Two (Theater Emphasis)

Regardless of the college of the University from which a student graduates, if he or she wishes to be certified through Ohio University to teach speech with a theater emphasis, the following program must be completed. The certificate for which this program prepares a person is a four-year provisional high school certificate which qualifies the holder to teach speech in grades 7 through 12, inclusive.

Methods Course:

INCO 421 Instructional Train. & Devel. in Comm.	5
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Major Requirements: 92

Fundamental Process (11)

INCO 101 Fundamentals of Speech	3
INCO 433 Applic. of Gen. Semantics	4
THAR 110 Intro. to Performance	4

Theory and History (32)

TCOM, JOUR 105 Intro. to Mass Comm.	3
INCO 234 Intro. to Comm. Theory	5
TCOM 270 Telecommunications & the Pub.	4
OR	
TCOM 441 Instructional Telecommunications	4
THAR 270 Theater Hist. I	3
THAR 271 Theater Hist. II	3

THAR 272 Theater Hist. III	3
THAR 170 Theater Exper.	4
THAR 171 Intro. to Play Analys.: Basis for Prod.	4
THAR 320 Dir. I	4
Forms of Speech (49)	
INCO 220 Oral Interp.	4
INCO 103 Pub. Spkng.	4
INCO 215 Argumentation & Debate	4
THAR 135 Practi. in Prod. Design	2
THAR 130 Intro. to Stagecraft	3
THAR 131 Intro. to Lighting	3
THAR 132 Intro. to Costuming	3
THAR 210 Acting I	4
THAR 211 Acting II	4
Select one of the following	3
THAR 230 Stagecraft: Scenery	
THAR 231 Stagecraft: Lighting	
THAR 232 Stagecraft: Costuming	
THAR 237 Makeup	1
THAR 420 Dir. II	4
Select 12 hours from the following THAR practica and at least two of the following areas must be covered:	
THAR 215, 315, 415 Acting	
THAR 135, 235, 335, 435 Prod. Design	
THAR 105, 205, 305, 405 Mgt.	
THAR 465 Dir.	
THAR 427 Stage Mgt.	

Health Education

Regardless of the college of the University from which a student graduates, if he or she wishes to be certified through Ohio University to teach health the following program must be completed. The certificate for which this program prepares a person is a four-year provisional high school certificate which qualifies the holder to teach health in grades 7 through 12, inclusive.

Methods Course:

HLTH 369 Tchng. of Health	5
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Required General Education Courses:

SOC 101 Intro. to Sociology	5
CHEM 121 Principles of Chemistry	4
ZOOL 101 Intro. to Zoology	5
GEOG 201 or GEOL 201 Man and Environment	4
Math	5

Major Requirements:

MICR 211 Environment Micro (212 optional)	3-5
ZOOL 301 Anatomy	6
ZOOL 345 Physiology	4
HEFN 128 Intro. to Nutrition	4
HECF 360 Human Sexuality	3
OR	
ZOOL 103	3
HLTH 202 Personal and Community Health	4
HLTH 204 Drugs, Alcohol, and Tobacco	3
HLTH 227 First Aid	3
HLTH 370 Community Health Problems	4
HLTH 380 Safety Education	4
HLTH 495 School Health Problems	5
HLTH 228 CPR	1
HPES 409 Tests and Measurements	4

History—Modular Social Studies Programs

Regardless of the college of the University from which a student graduates, if he or she wishes to be certified through Ohio University to teach history and one of the other social science areas the following program must be completed. The certificate for which this program prepares a person is a four-year provisional high school certificate which qualifies the holder to teach history and another social studies field, in which 30 hours have been completed, in grades 7 through 12, inclusive.

Methods Course:

EDSE 479 Tchng. Social Studies in Jr. & Sr. H.S.	3
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Major Requirements:

History (48)

HIST 101, 102, 103 Western Civ.	12
HIST 211, 212, 213 U.S. Hist.	12

Select two courses for a minimum of six hours

from each of the following fields:*

European History

U.S. History

Other (African, Ancient, Asian, Latin American, Middle Eastern)

8 hrs of the above advanced history courses must be at the 300 level or above.

*If necessary, select sufficient electives in history to bring total to 48 hrs.

Select one of the following fields and complete at least 30 qtr hrs in that field:

Political Science: 30

POLS 101 and 102 OR 103

Choose one course from each of the following:

POLS 230, 331, 333, 335, 432, 433, 434, 435, 436, 441, 445, 446, 447A or B

POLS 401, 402, 409, 413

POLS 304, 306

POLS 320, 323

POLS 250, 351, 354, 427, 452

Choose one of the following:

POLS 405, 410, 415, 417, 418, 481, 485

Choose enough electives in political science to bring the total number of hrs earned in that field to 30.

Economics: 30

ECON 101 and 102 (or 301 and 302)

ECON 303 and 304

Select one of the following:

ECON 370, 371, 372

ECON 360

ECON 340

ECON 352

Social Psychology: 30

Required courses:

PSY 101, 121, 226, 304, 333, 336

Select at least one course from the following:

PSY 241, 261, 273, 310, 312, 332, 335, 376, 490 seminars in social or developmental psychology

Geography: 30

Required courses:

GEOG 101, 121, 130, 201, 260

Select 2 electives in regional geography so as to include one course in the western region (GEOG 140, 142, 240, 241, 242, 340, 343, 355) and one in the nonwestern region (GEOG 141, 345, 351, and 352)

Select 2 elective courses in upper level systematic geography (GEOG 301, 311, 312, 321, 325, 326, 327, 330, 331, 420, 421, 422, 429, and 435)

Sociology and Anthropology: 30

SOC 101 or 302

ANTH 101

SOC 201

SOC 220

Select one of the following:

SOC 211, 315, 329, 331, 428, 430, 432

Select one of the following:

SOC 361, 362, 363, 424

Electives in sociology or anthropology to bring total to 30 hrs.

Home Economics

Regardless of the college of the University from which a student graduates, if he or she wishes to be certified through Ohio University to teach vocational home economics or home economics education, the following program must be completed. The certificate for which this program prepares a person is a four-year provisional high school certificate which qualifies the holder to teach voca-

tional home economics or home economics education in grades 7 through 12, inclusive.

Methods Course:

HECE 340 Tchng. Home Econ.	4
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Required General Education Courses

INCO 103 Pub. Spkng.	4
English or Language	13-15
PSY 101 Gen. Psych.	5
SOC 101 or 301 Intro. to Sociology	5
ECON 101 or 301 Prin. of Econ.	4
CHEM 121, 122, and 123	12
OR	
BOT 101, 102 and ZOOL 103	14
OR	
ZOOL 101, 103, and 151	15
MATH or PSY 121	5
MICR 211 and 212 Environmental Microbiology or approved course in zoological and biomedical sciences	5
ART 101	4
Comparative Arts, Religion, or Philosophy	4-5

Home Economics Basic Requirements:

HEG 101 Prof. Awareness	2
HEFN 128 Intro. Nutrition	4
HEID 180 Furnishing Today's Home	3
HECF 371 Family Devel.	3
HECE 395 Home Mgt.	3

Specialized Requirements:

HEFN 120 Meal Mgt.	3
HEFN 222 Food Science Prin.	4
HETC 213 Design Analysis: Theory & Prin.	5
HETC 315 Elem. Textiles	4
HETC 117 Textiles & Dress & Environment	3
HECF 160 Intro. to Child Devel.	4
HECF 361 Preschool Guidance	4
HECE 390 Family Consumer Econ.	3
HECE 396 Home Mgt. Lab.	4
HECE 391 Equipment	4
HECE 299 Seminar	2-5
HECE 399 Seminar	2-5
Approved Electives from 300- and 400-level courses in:	
Human Nutrition and Food Science	3-4
Human Environment & Design	6-8
Human Development and Family Ecology	3-4

Students may complete requirements for job training certification by taking 45 hours of coursework in a specialized area of home economics. Permission must be granted by the home economics education advisor. The three options are *Job Training — Child Care Service*; *Job Training — Food Service*; and *Job Training — Community and Home Service*.

Industrial Arts Comprehensive

A student who desires to be graduated from the College of Engineering and Technology with a major in industrial technology and wishes to obtain through Ohio University a four-year provisional high school certificate valid for teaching industrial arts in grades 7 through 12, inclusive, follows the major as specified for the B.S.I.T. Those who desire the B.S.I.T. degree with the teaching option should contact the chairman of the Department of Industrial Technology for further information.

All other students who desire to teach industrial arts must be enrolled in the College of Education and must complete the following program. The certificate for which this program prepares a student is a four-year provisional high school certificate which qualifies the holder to teach industrial arts in grades 7 through 12, inclusive.

Methods Course:

IT 470 Intern Teaching	3
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Major Requirements: 100

IT 101 Engr. Drawing	3
IT 102 Engr. Drawing	3
IT 115 Metal Fabrication	4
IT 117 Metal Machining	3
IT 220 Small Engines	3
IT 244 Graphic Proc.	3
IT 250 Wood Industry	3
IT 370 Pub. and Pro. Writing	5
IT 301 Ceramic Prod.	3
IT 308 Plastics	3
IT 310 Metal Casting	3
IT 332 Electronics	5
IT 333 Semi-Conductors	3
IT 341 Proc. Photo.	3
IT 347 Plastics Proc.	3
IT 350 Wood Forming	5
IT 361 Prod. Design	2
IT 390 Materials	3
IT 471 Admin. of Industrial Educ.	3
IT 472 Contemporary Programs	3
Technical electives	7
Chemistry, physics, and mathematics (Minimum of one course in each field)	25

Latin

Regardless of the college of the University from which a student graduates, if he or she wishes to be certified through Ohio University to teach Latin, the following program must be completed. The certificate for which this program prepares a person is a four-year provisional high school certificate which qualifies the holder to teach Latin in grades 7 through 12, inclusive.

Each person selecting Latin as a major teaching field must have a minor or second teaching field. Requirements for all of the second teaching fields are available in the Student Personnel Services Office, McCracken Hall.

Methods Course:

LAT 364 Tchng. of H.S. Latin	3
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Major Requirements: 39-51

LAT 101, 102, 103 Begin. Latin	12
Students entering with two years of high school Latin must complete at least 39 hours of Latin numbered above 103, including:	
CLNG 401 Life of Romans	3
LAT 433 Advanced Latin Syntax	3
One other 400-level Latin course	
Students entering with three or four years of high school Latin will normally register for LAT 351, Latin Prose and Poetry — 3 hours, and then must complete at least 30 hours more of Latin including:	
CLNG 401 Life of Romans	3
LAT 433 Adv. Latin Syntax	3
One other 400-level Latin course	

Mathematics

Regardless of the college of the University from which a student graduates, if he or she wishes to be certified through Ohio University to teach mathematics, the following program must be completed. The certificate for which this program prepares a person is a four-year provisional high school certificate which qualifies the holder to teach mathematics in grades 7 through 12, inclusive.

Methods Course:

MATH 320 Tchng. of Math in Second. School	5
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Major Requirements: 60

Select at least 50 quarter hours of mathematics as follows:

MATH 263 A, B, C Analyt. Geom. & Calc.	15
MATH 314 Elem. Abstract Algebra	5
MATH 330 Found of Geom.	5
One of the following courses in computer science:	
220 or 230	5
Elect one mathematics course 200 level or above	5
15 quarter hours of mathematics at the jr.-sr. level excluding MATH 320	15

An additional 10 quarter hours are required and may be selected from any one or combination of the following:

Mathematics at the 200 level or above excluding MATH 320	
Computer science at the 200 level or above	
ASTR 300, 301, 350	
CE 220, 321	
PHYS 251, 252	
PHIL 320, 420, 421	

Modern Languages Comprehensive

Regardless of the college of the University from which a student graduates, if he or she wishes to be certified through Ohio University to teach one of the modern foreign languages, the following program must be completed. The certificate for which this program prepares a person is a four-year provisional high school certificate to teach one of the modern foreign languages (French, German, Spanish) in grades 7 through 12, inclusive.

Students who have completed one year or less of high school work in the language in which they are majoring should start with ML 111 — Elementary Language — 4 hours. Students who have completed two or three years of high school work in the language in which they are majoring should start with ML 211 — Intermediate Language — 4 hours. Students who have completed four or more years of high school work in the language in which they are majoring should start with ML 213. Regardless of the level at which a student starts the college language, he or she must complete at least 56 quarter hours in that language beyond 113.

Methods Course:

LANG 410 Lang. Lab.	3
ML 445 Tchng. of Mod. Foreign Lang.	3

Major Requirements: 56-69

LANG 111, 112, 113 Basic or 114 Intensive	12
All students must have 56 hours above LANG 113 or 114.	
LANG 211, 212, and 213	12
LANG 341, 342, 343 Adv. Conversation & Comp.	12
LANG 348 or 349 Civ. & Culture	4
LANG 355 and 356 Lit. Readings	8
LANG 354 (Span. majors only)	4
LANG 437 Phonetics	4
LANG 439 or 441 Stylistics	4
Electives at 400 level or above	8
Select 3 hours from the following	
(not required for Span. majors)	3
Cultural Anthropology	
Cult. & Civ. of Country	
History of Country	
Linguistics	
(Study Abroad Recommended)	

Music Education with Instrumental Emphasis

Regardless of the college of the University from which a student graduates, if he or she wishes to be certified through Ohio University to teach instrumental music, the following program must be completed. The certificate for which this program prepares a person is a four-year provisional special field certificate which qualifies the holder to teach music in grades kindergarten through 12, inclusive.

Methods Courses:

MUS 363 Meth. & Mater. Inst.	3
MUS 261 String Meth. & Materials	2-4
MUS 263 Wind & Perc. Methods	10-12

Major Requirements:

Applied Music (in principal instrument sufficient to pass prof. test—See School of Music Handbook) 18
Second Instr.—Piano unless audition determines no further study is needed. Then another instrument must be studied instead. A piano proficiency examination or its equivalent is also required 6-12

Major Performing Groups

(minimum one per quarter)	11
MUS 90 (to be taken nine quarters)	0
MUS 101, 102, 103 Theory	12
MUS 125 Introduction to Music History and Lit.	3
MUS 147 Class Voice	2
MUS 148 Class Voice	2
MUS 201, 202, 203 Harmony	9
MUS 204, 205, 206 Dict. & Sight Sing.	6
MUS 304 Instrumentation	3
MUS 322, 323 History of Music	6
MUS 413 Intro. to Electronic Music	2
MUS 455, 457 Conducting	6
MUS 464 Marching Band Techniques	2
Jazz Elective	2
MUS 261, 263, 283, 366, or 468	2-3
Music Ed. electives	4
Music History elective	3

Note: Some of the courses in this program are under revision. Students should contact the School of Music for current information about their requirements.

Music Education with Choral Emphasis

Regardless of the college of the University from which a student graduates, if he or she wishes to be certified through Ohio University to teach choral music, the following program must be completed. The certificate for which this program prepares a person is a four-year provisional special field certificate which qualifies the holder to teach music in grades kindergarten through 12, inclusive.

Methods Courses:

MUS 364 Sec. Sch. Vocal Tech.	3
MUS 366 Teach. of Mus. in the Elem. Grds.	3
MUS 468 Gen. Music in Jr. H.S.	3

Major Requirements:

Applied Music	18
Principal instrument (voice or piano sufficient to pass prof. test — See School of Music Handbook for requirement) ..	6-12
Secondary instrument (voice or piano sufficient to pass prof. test — See School of Music Handbook for requirement) ..	6-12
Major Performing Groups (minimum one per quarter)	11
MUS 90 (to be taken nine quarters)	0
MUS 101, 102, 103 Theory	12
MUS 125 Introduction to Music History and Lit.	3
MUS 201, 202, 203 Harmony	9
MUS 204, 205, 206 Dict. & Sight Sing.	6
MUS 261 String Methods	2
MUS 263 Wind & Perc. (3 qtrs., 2 hrs. ea.)	6
MUS 283 Recreational Music Inst. and Materials	3
MUS 322 and 323 History of Music	6
MUS 413 Intro. to Electronic Music	2
MUS 455 and 456 Conducting	6
Music education elective	2
Music history elective	3
Music theory elective	3
Music education, history, or theory elective	3

Note: Some of the courses in this program are under revision. Students should contact the School of Music for current information about their requirements.

Physics

A student may earn a B.S.Ed. in the College of Education or an A.B. or B.S. in physics in the College of Arts and Sciences and meet teacher certification requirements. Regardless of the college of the University from which a student graduates, if he or she wishes to be certified through Ohio University to teach physics as the major field, the following program must be completed. The certificate for which this program prepares a person is a four-year provisional high school certificate which qualifies the holder to teach physics in grades 7 through 12, inclusive.

Students are strongly urged to complete a second teaching field preferably in another science or in mathematics. The hours required to complete a minor in math or the other science fields are approximately: math — 10 hrs., biology — 32 hrs., chemistry — 21 hrs., earth science — 35 hrs., general science — 18 hrs. Program sheets detailing specific course requirements in these minors are available in the Student Personnel Services Office, McCracken Hall.

Methods Course:

EDSE 478 Tchng. of Physical Science 3

Major Requirements: 77-78

Tool Courses (35)

CHEM 141, 142, 143 15
MATH 263A, 263B, 263C, 340 20

Physics Courses (41-42)

PHYS 201, 202, 203, 315 Intro. to Physics 16
OR
PHYS 251, 252, 253 Gen. Physics 15
PHYS 272, 273 Electronics Lab. 4
PHYS 311, 312 Mechanics 8
PHYS 371, 372 Interm. Lab. 4
PHYS 451, 452 Quantum Physics 8
PHYS 316 Cont. Phys. for Science & Engr. 3

Other 300- or 400-level physics courses, or up to five hours of astronomy courses, or physical science courses (except 101 and 102) can be substituted upon permission of the Physics Department and The College of Education.

Physical Education — Men and Women

Regardless of the college of the University from which a student graduates, if he or she wishes to be certified to teach physical education, the following program must be completed. The certificate for which this program prepares a person is a four-year provisional special field certificate which qualifies the holder to teach physical education in grades kindergarten through 12, inclusive.

Methods Course:

HREC 402 Teaching Strategies in Physical Education 3

Major Requirements: (Elementary-Secondary, Certification)

ZOOL 301 Human Anatomy 6
ZOOL 345 Human Physiology 4
HLTH 227 First Aid 3
HLTH 495 School Health Prob. 5
HPES 105 Cond. for Activ. & Organic Effic. 2
HPES 106 Intro. to Human Movement 2
HPES 115 Rhythmic Activities 2
HPES 134 Intro. to Field Experience 2
HPES 222 Tumbling & Mod. Gymnastics 2
HPES 223 Track and Field 2
HPES 225 Gymnastics for men and women 2
HPES 234 Field Experience 1-4
HPES 273 Movement Educ. & Fund. Skills 3
HPES 274 Sport and Game Skills for
Elem. Sch. Children 3
HPES 275 Elem. School Rhythm & Dance 3

HPES 302 Kinesiology 4
HPES 333 Theory of Adapted Physical Education 3
HPES 334 Field Experience 1-4
HPES 372 Theory and Practice of Team and
Indiv. Sports 3
HPES 377 Theory and Practice of Elem. Phys. Educ. 3
HPES 404 History and Prin. of Physical Education 4
HPES 405 Motor Learning 4
HPES 406 Org. and Administration 4
HPES 409 Tests and Measurements 4
HPES 434 Field Experience 1-4
HPES 485 Percept. Motor Devel. in Children 3

TEAM SPORTS: (Select 4 credits)

HPES 260A Flag Football 1
HPES 260B Team Handball 1
HPES 262A Field Hockey 1
HPES 262B Soccer 1
HPES 263A Basketball 1
HPES 263B Volleyball 1
HPES 264A Softball 1
HPES 264B Lacrosse 1

INDIVIDUAL SPORTS: (Select 2 credits)

HPES 141A Archery 1
HPES 141B Golf 1
HPES 221A Tennis 1
HPES 221B Badminton 1
HPES 224A Racquetball 1
HPES 224B Wrestling 1

AQUATICS: (Select 2 credits)

HPES 104 Swimming II 2
HPES 218 Life Saving 2
HPES 220 Water Safety Instructors 3

DANCE: (Select 2 credits)

HPES 107 Modern Dance I 2
HPES 116 Social Forms of Dance 2
HPES 117 Folk and Square Dancing 2

Social Psychology

Regardless of the college of the University from which a student graduates, if he or she wishes to be certified through Ohio University to teach social psychology, the following program must be completed. The certificate for which this program prepares a person is a four-year provisional high school certificate which qualifies the holder to teach social psychology in grades 7 through 12, inclusive.

Each person selecting social psychology as a major teaching field must have a second teaching field selected from biological science, general science, English, history, mathematics, political science, chemistry, physics, health, physical education, or industrial arts.

Social psychology is an experimental program and because of limited student placements only a few persons will be allowed to enter this program each year. Definite screening procedures have been established and you can gain more information by contacting the Student Personnel Services Office, Room 124, McCracken Hall.

Methods Course:

EDSE 479 Tchng. of Social Sciences in Jr. & Sr. H.S. 3

Major Requirements: 50

PSY 121 Statistics 5
PSY 226 Experimental 4
PSY 241 Behavioral Measurement 4
PSY 336 Social 4
PSY 304 Human Learning 4
PSY 333 Personality 4

Select at least two courses from the following:

PSY 273, 307, 315, 374, 376

Select at least one course from the following:

PSY 311, 312, 314, 327

Select at least one course from the following:

PSY 261, 310, 332, 335, 490 seminars in social or organizational psychology

Electives in psychology to equal 50 hours.

Social Studies Comprehensive

Regardless of the college of the University from which a student graduates, if he or she wishes to be certified through Ohio University to teach under the social studies comprehensive, the following program must be completed. The certificate for which this program prepares a person is a four-year provisional high school certificate which qualifies the holder to teach history, an integrated social studies course, and any other component area in which at least 18 hours have been completed, in grades 7 through 12, inclusive.

Each student is to complete the required 36 hours of history and then complete 18 hours in one (or more if desired) of the other five fields (economics, geography, political science, sociology, and anthropology) and eight hours in each of the remaining fields. For example, a student would complete the required 36 hours of history, the 18 hours required in political science, and the required eight hours in each of the fields of economics, geography, sociology, and anthropology. In this example, the certificate issued would be valid for teaching history, an integrated course in social studies, and political science.

Methods Course:

EDSE 479 Tchng. of Social Studies in Jr. & Sr. H.S. 3

Major Requirements: 90

History: 36

Select two of the following:

HIST 101, 102, 103 Western Civ. 8

Select two of the following:

HIST 211, 212, 213 U.S. Hist. 8

Select two courses for a minimum of 6 hrs of either

U.S. or Modern European history at 300 level or above (Ohio history recommended)

Select two courses for a minimum of 6 hrs of non-U.S., non-modern European history

Select sufficient electives in history at the 300 level or above to bring total to 36 hrs.

Select a minimum of 18 qtr hrs in ONE of the following fields AND a minimum of 8 qtr hrs in each of the other fields:

Political Science:

POLS 101* and 102* OR 103* Am. National. Select any 10 add't qtr hrs to fulfill 18 hr field.

Economics:

ECON 101* and 102* OR 301* and 302*

Elect any 10 additional qtr hrs to fulfill 18 hr field (may include ECED 346)

Geography:

GEOG 101*

GEOG 121*

Select one elective in regional geography (GEOG 140, 141, 142, 240, 241, 242, 340, 343, 345, 351, 352, 355) and one elective in upper level systematic geography (GEOG 301, 311, 312, 321, 325, 326, 327, 330, 331, 420, 421, 422, 429, and 435) and any needed electives.

Sociology:

SOC 101* or 302*

Select one course to complete 8 hr field*

Sociology elective including one course at the 400 level to complete 18 hr field.

Anthropology:

ANTH 101*

Select one course to complete 8 hr field.*

Anthropology elective including one course at the 400 level to complete 18 hr field.

Select electives in any one or combination of the above fields to bring total qtr hrs to 90.

*Courses required in 8 qtr hr minimum choice.

SPECIAL EDUCATION PROGRAMS

Four professional preparation programs are available to prospective teachers of exceptional children. These programs are for teachers of (1) educable mentally retarded children and children with learning and behavior disorders (EMR/LD), (2) speech and hearing therapy, (3) a combination of EMR/LD and early childhood education, and (4) moderately, severely, and profoundly retarded.

Educable Mental Retardation and Learning Disabilities

Required General Education Courses:

Students must also complete Ohio University's program of General Education (see General Education Requirement in the *Graduation Requirements* section of this catalog) and are urged to consult with their advisors to plan to meet both sets of general education requirements.

Humanities 8

Eight hours of humanities are required. Possible courses include any combination of the following: comparative arts, art history, great books (HUM 107, 108, 109, 307, 308, and 309), philosophy, art (except for ART 360, 460, 461, 462), theater history, and music (except for music education and music therapy courses). No more than three one-hour participation courses would be acceptable.

Natural Sciences 8

Eight hours of natural sciences are required. Possible courses include any combination of the following: botany, zoological and biomedical sciences, physics, geological sciences, chemistry, or physical world. One of the courses taken must contain a laboratory component.

Social Sciences 8

Eight hours of social sciences are required. Possible courses include the following: anthropology, economics, economic education, geography, political science, history, sociology, or social welfare.

Psychology 8

Eight hours of electives in psychology are required. The following are recommended: PSY 121, 231, 241, 304, 310, 312, 315, 333, and 336; and EDSP 400. (EDGS 410 may be substituted for one psychology course.)

INCO 101 or 103 Fund./Pub. Spkg. 3-4

PSY 101 Gen. Psych. 5

English 9

Freshman and junior composition requirement

Speech and Hearing Therapy 3-5

HSS 108 Intro. to Speech Disorders or HSS 336 Speech & Hearing Disorders in the Pub. Schools

MATH 120 5

MATH 120 is recommended; however, any mathematics course(s) numbered above 120 equaling five hours would be acceptable (except Math 151).

Music

MUS 160 Music Fundamentals 3

MUS 161 Music for Classroom Teacher 3

ART 360 Art for the Elementary Teacher or two of the following courses 6

THAR 441 Creative Dramatics 3

IT 391 Elem. Industrial Arts 2

MUS 282 Mus. Therapy Meth. 3

HREC 251 Art and Nature Crafts 3

Health

HLTH 202 Personal & Community Health 4

Recreation for the Handicapped 3-5

HREC 250 Recreation Leadership, or HPGS 333,

HREC 433, EDSP 435, HREC 315C, or HPES 485C.

Major Requirements:

Block I (Freshmen and Sophomores)

EDSP 160 Field Experience in Special Education 1

EDSP 271 Introduction to Education of

Except. Childrn. 3

EDEL 200 Studies of Children 4

EDCI 275 Learning Process in the Classroom	5
OR	
PSY 275 Educational Psychology	4
Block II (Sophomores)	
EDSP 272 Introduction to Educ. of Mentally Ret.	3
EDSP 373 Curriculum and Materials for Mentally Ret.	3
EDSP 270 Classroom Management of Children I	3
EDSP 260 Field Experience in Spec. Educ.	2
EDM 480 Intro. to Educational Media	4
EDCI 401 Advanced Field Exper./Urban	2
Block III (Sophomores and Juniors)	
EDSP 374 Teaching Lang. Arts to Mentally Ret.	4
EDSP 375 Social Studies & Science for Mentally Ret.	4
EDSP 377 Career and Voc. Educ. for Handicapped	3
EDSP 270 Classroom Management II	3
EDSP 360 Field Experiences in Special Educ.	3
Block IV (Juniors)	
EDEL 311 Teaching of Reading in Elem. School	4
EDEL 311L Field Experiences/Elem. Reading	1
EDSP 485 Diagnosis and Eval. of Handicapped	3
EDSP 376 Tchng. Math for Ment. Ret. & Learning	
Disabled	4
EDSP 474 Intro. to Specific Learning Disabilities	4
Block V (Seniors)	
EDEL 411 Diagnosis and Treatment of Reading Prob.	4
EDSP 476 Teaching the Learning Disabled	4
EDSP 477 Communicating with Parents of	
Except. Indiv.	3
EDSP 460 Field Experiences in Special Educ.	3
Post-Student Teaching	
EDCI 480 Teacher, School and Society	3
<i>Professional Laboratory Experience:</i>	
EDPL 461 and 462 Stu. Tchng.	13
EDPL 465 Stu. Tchng. Seminar	3

These three courses are taken concurrently in one quarter and constitute the student teaching requirement. A person should make an application for student teaching by December 1 of the year prior to the year in which student teaching is to be taken. For example, anyone doing student teaching during any of the three quarters of the school year 1985-86 should apply for student teaching by December 1, 1984. For further information about student teaching, contact the Field Experience Office. Students must complete Block IV before entering student teaching.

Moderately, Severely, and Profoundly Retarded

Students must also complete Ohio University's program of General Education (see General Education Requirement in the *Graduation Requirements* section of this bulletin) and are urged to consult with their advisors to plan to meet both sets of requirements.

Required General Education Courses

Humanities: 8

Eight hours of humanities are required. Possible courses include any combination of the following: comparative arts, art history, great books (HUM 107, 108, 109, 307, 308, and 309), philosophy, art (except ART 360, 460, 461, 462), music (except for music education and music therapy courses. No more than three one-hour participation courses would be acceptable.), theater history courses.

Natural Sciences: 8

Eight hours of natural sciences are required. Possible courses include any combination of the following: botany, zoological and biomedical sciences, physics, geological sciences, chemistry, or physical world. One of the courses taken must contain a laboratory component.

Social Science: 8

Eight hours of social sciences are required. Possible courses include the following: anthropology, economics, economic educa-

tion, geography, political science, history, sociology, or social welfare.

Psychology: 8

Eight hours of psychology are required. The following are recommended: PSY 121, 231, 241, 304, 310, 312, 315, 332, 333, and 336.

PSY 101 General Psychology	5
INCO 101 or 103	3-4

English: 9-10

ENG 151, 152, or 153 and ENG 308

Speech and Hearing Therapy: 13

HSS 108 Intro. to Speech Disorders	5
HSS 210 Language Development	5
HSS 378 Sign Language	3

Math: 5

MATH 120 Elem. Topics in Math

Music: 6

MUS 160 Music Fundamentals	3
MUS 282 Music Therapy Meths. & Media	3
OR	
MUS 161 Mus. for Classrm. Tchr.	3

Art: 5-6

ART 360 Art for Elem. Tchr.	6
THAR 441 Creative Dramatics	3
IT 391 Elem. Industrial Arts	2
HREC 251 Art and Nature Crafts	3

Health: 7

HLTH 202 Personal & Comm. Hlth.	4
HLTH 227 First Aid	3

Recreation: 3-4

HREC 250 Recreation Leadership	3
OR	
HREC 315 Outdoor Educ. & Rec.	4

Minor Area of Concentration: 20

Students are required to complete a 20-hour area of concentration in one related area outside of the College of Education. Common minors are adult services, residential services, psychology, sociology, speech pathology, social work, physical education, and home economics. Students may count courses taken to complete the general education requirements, excluding PSY 101, toward fulfillment of the minor area of concentration. Combination of several areas is not acceptable except in the natural sciences, adult services, or residential services.

Students desiring a second certification in adult services for employment in a sheltered workshop or in a residential home may select applicable courses in their minor. Contact the special education coordinator for advisement and course selection.

Related Professional Requirements

EDM 480 Intro. to Educ. Media	4
EDGS 410 Human Relations	3

Major Requirements

Block I

EDSP 271 Intro. Ed. Except. Child	3
HECF 160 Intro. Child Development	4
OR	
EDEL 200 Studies of Children	4
EDSP 160 Field Exp. Spec. Educ.	2

Block II

EDSP 272 Intro. to Educ. of MR	3
EDSP 373 Curric. & Mat. for the MR	3
EDSP 270 Classroom Mgt.	3
EDSP 260 Field Exp. in Spec. Educ.	2

EDCI 275 Lrng. Process in Classroom	5
OR	
PSY 275 Educational Psychology	4
Block IIIB	
EDSP 361 Field Exp. in Spec. Educ.	3
EDSP 372 Lang. Dvlp. for Handicapped	3
EDSP 475 Educ. of Trainable Retarded	4
EDSP 477 Communicating with Parents	3
HPES 485 Percept. Motor Dvlp. Chld.	3
Block IVB	
EDSP 371 Tchng. Presch. Hand.	3
OR	
EDSP 379 Home & Fam. Liv. for Hand.	3
EDSP 461 Field Exper. Spec. Educ.	2
EDSP 473 Educ. Severe. Multi-Handi.	4
EDSP 481 Mgt. of Med. & Phy. Prob.	3
HREC 433 Recreation for the MR	3
EDCI 401 Advanced Field Exp./Urban	2
Recommended Professional Electives	
EDSP 378 Sheltered Workshop	2
HECF 361 Prin. of Presch. Guid.	4
Professional Laboratory Experience	
EDPL 461 and 462 Student Teaching	13
EDPL 465 Student Teaching Seminar	3

These three courses are taken concurrently in one quarter and constitute the student teaching requirement. A person should make an application for student teaching by December 1 of the year prior to the year in which student teaching is to be taken. For example, anyone doing student teaching during any of the three quarters of the school year 1985-86 should apply by December 1, 1984. For further information contact the Field Experience Office. Students must complete Block IVB before entering student teaching.

Special Education/Early Childhood

Special education/early childhood prepares persons to meet State of Ohio teacher certification requirements as teachers of the educable mentally retarded and as teachers of children with learning disabilities and/or behavior disorders, and to be teachers in preschool. At the present time, there is no teaching certificate for preschool; however, such certification is being discussed and may be enacted in the near future. The preschool aspect of this major meets what is currently being discussed as possible certification requirements. The concept of trained personnel working in special education with preschool children is one of the national trends in education.

Students are advised that the special education/early childhood program is a *dual concentration* and so is likely to take longer than the 12 quarters ordinarily needed for a bachelor's degree. Students in the program should schedule carefully and work closely with their advisors.

Required General Education Courses

Social Sciences: 8	
ECON 101 Prin. of Econ.	4
OR	
ECED 346 Econ. in Curr.	3-5
SOC 101 Intro. to Soc.	5
OR	
SOC 201 Social Problems	4
Natural Sciences: 9	
ZOOL 101 Prin. of Biol.	5
OR	
BOT 101 Prin. of Biol.	5
ZOOL 103 Human Biol.	4
PSY 101 Gen. Psych.	5

INCO 101 Fund. of Speech	3
OR	
INCO 103 Pub. Spkng.	4
English, fr. & jr. lev. comp.	9
HSS 108 Intro. to Speech Disorders	5
OR	
HSS 336 Speech & Hear. Disorders in the Public Schools	3
MATH 120 Elem. Topics in Math	5
Music: 6	
MUS 160 Music Fundamentals	3
MUS 161 or 262 Mus. Classrm. Tchr.	3
ART 360 Art for Elem. Teachers	6
Health: 7-9	
HLTH 202 Persnl. & Community Hlth.	4
OR	
HLTH 227 First Aid	3
HREC 433 Recreation for MR	5
OR	
HREC 250 Recreation Leadership	3
OR	
HPES 333 Theory of Adapted Activity	3

Related Professional Education:

HECF 463 Preschool Admin.	5
EDEL 306 Kindergarten Educ.	6
EDSP 371 Tchng. Preschool Handicap	3

Major Requirements:

Block I (Sophomores and 3rd Qtr. Freshmen)	
EDSP 160 Fld. Exp. in Spec. Ed.	1
EDSP 271 Intro. to Educ. Excep. Children	3
EDEL 200 Studies of Children	4
OR	
HECF 160 Intro. to Child Dvlp.	4
EDCI 275 Lrng. Proc. in Classrm.	5
OR	
PSY 275 Educ. Psych.	4
Block II (Sophomores)	
EDSP 272 Intro. to Educ. of MR. Children & Youth	3
EDSP 373 Curr. & Matrl. for MR.	3
EDSP 270 Classrm. Mgt. Child I	3
EDSP 260 Field Exp. Spec. Ed.	2
EDM 480 Intro. to Educ. Media	4
Block III (Junior and 3rd Qtr. Sophomores)	
EDSP 374 Tchng. Lang. Arts MR.	4
EDSP 375 Soc. Studies & Sci. MR.	4
EDSP 377 Career Vocnl. Ed. Handicapped	3
EDSP 370 Classroom Mgt. II	3
EDSP 360 Fld. Exp. Spec. Ed.	3
Block IV (Junior and Senior)	
EDEL 311 Tchng. Rdng. Elem. Sch.	4
EDEL 311L Fld. Exp. Elem. Sch.	1
EDSP 474 Intro. to Spec. Lrng. Dis.	4
EDSP 376 Tchng. Math. MR. & LD.	4
Block V (Senior)	
EDSP 476 Tchng. The Lrng. Disab.	3
EDSP 460 Fld. Exp. Spec. Ed.	3

Early Childhood: 22

HECF 360 Human Sexuality	3
HECF 363 Creative Experience with Preschool Children ...	4
HECF 371 Family Dvlp.	3
HECF 462B Parenthood	2
HECF 462D 1-Parent Family	2
HEFN 232 Infant & Child Nutrition	3
OR	
HEFN 128 Intro. to Nutrition	4
HECF 361 Prin. of Presch. Guidance	4

Professional Laboratory Experience:

EDPL 461-462 Stu. Tchng. in Elem. Schools	13
EDPL 465 Stu. Tchng. Sem.	3

These three courses are taken concurrently in one quarter and constitute the student teaching requirement. A

person should make an application for student teaching by December 1 of the year prior to the year in which student teaching is to be taken. For example, anyone doing student teaching during any of the three quarters of the school year 1985-86 should apply for student teaching by December 1, 1984. For further information about student teaching, contact the Field Experience Office.

Post-Student Teaching

HECF 464 Nursery School Practi. 6

Students must sign up with the director of the Child Development Center, at least one year in advance.

Suggested Electives

EDSP 400, 473, 481, 372, & HECF 365

Speech and Hearing Therapy

The bachelor's degree in HSS is considered pre-professional. Students entering the program must be eligible to go on to graduate school to obtain clinical certification or to complete coursework and student teaching for certification as a speech therapist in public schools.

Required General Education Courses

Select 27 quarter hours from the following areas to include at least one course from each of the four areas.

Science and/or Mathematics — Courses to be selected from: astronomy, botany, zoological and biomedical sciences, chemistry, physics, physical science, geological sciences, or any course in the Mathematics Department EXCEPT 011, 032, 101, 109A, 109B, 320, and 420. PSY 121 is also considered a math course.

Comparative Arts and/or Philosophy — Possibilities include any courses in the Philosophy Department; Comparative Arts Department; HUM 107, 108, 109, 307, 308, 309; theater history courses; art history courses; art courses EXCEPT for ART 360, 460, 461, 462; School of Music courses EXCEPT for music education courses and music therapy courses; AAS 101, 119, 121, 302.

Social Science — Possibilities include anthropology, economics, geography, political science, history, sociology, or social welfare; AAS 103, 106, 107, 201, 251, 252, 253, 254, 264, 350, 360, 362, 440, 442, 490N.

English and/or Foreign Language — LING 270 is required. Freshman and junior English composition courses taken to satisfy the University English composition requirement (see English Composition Requirement in the *Graduation Requirements* section of this catalog) may be used toward completion of these hours. Other possibilities include all English courses EXCEPT ENG 450A and 450B; and foreign language courses EXCEPT ML 410 and 445; HUM 107, 108, 109, 307, 308, 309 (these humanities courses may NOT count toward the general education requirements in both the English and/or foreign language field AND the comparative arts and/or philosophy field).

If one course in each of the above fields does not add up to a total of 27 quarter hours, then a student must elect sufficient hours in one or a combination of the above areas to bring the total hours in general education to 27 quarter hours.

Psychology:

PSY 101 Gen. Psych. 5
EDEL 200 Studies of Children 4
PSY 332 Abnormal Psych. 4
OR
PSY 333 Psych. of Personality 3
OR
EDSP 272 Intro. to Educ. of Mentally Retarded Children & Youth 3

PSY 310 Motivation 4
OR
LING 350 Intro. to Gen. Linguistics 5
OR
PSY 307 Psycholinguistics 4
OR
PSY 490A-Z 4-5

Professional Education:

EDCI 275 Learning Process in the Classroom 5
OR
PSY 275 Educational Psychology 4
EDEL 200L Learning Process in Classroom/Field Exp. 1
EDCI 401 Advanced Field Experience/Urban 2
EDEL 311 Teaching of Reading in Elementary School 4
EDEL 311L Teaching of Reading Elementary Sch./Field ... 1
EDGS 410 Human Relations 3
EDSP 270 Classroom Management I 3
EDSP 271 Intro. to Educ. of Excep. Child and Youth 3
OR
PSY 376 Psy. Dis. of Child 4
EDSP 474 Intro. to LD. 4

Major Requirements:

HSS 107 Voice & Articulation 2
HSS 108 Intro. to Speech Disorders 5
HSS 209 Phonetics 4
HSS 210 Lang. Development 5
HSS 240 Practi. 2
HSS 213 Anat. 4
HSS 250 Speech Science 4
HSS 270 Basic Audiology 4
HSS 318 Articulation Disorders 5
HSS 315 Stuttering 3
HSS 322 Diagnostics 4
HSS 341 Practi. 3
HSS 344 Disorders of Lang. 4
HSS 345 Social Dialects 3
HSS 319 Voice & Resonance 3
HSS 471 Auditory Rehabilitation 5
HSS 479 Basic Manual Com. 3
HSS 442 Practi. 3
HSS 424 Neuropathology 4

STUDENT TEACHING

Successful student teaching represents the culmination of the program of professional preparation; it is a requirement for the bachelor of science in education degree for persons pursuing programs which are designed to result in eligibility for teacher certification. No candidate will be considered for recommendation for a teaching certificate who has not completed, under the supervision of Ohio University, at least 13 quarter hours of observation, participation, and student teaching.

Application

It is the responsibility of the student to enter an application for student teaching in the office of the director of field experience not later than December 1 preceding the academic year in which a student teaching assignment is desired.

Schedule and Facilities

Students experience the complete range of the teacher's activities in full-time student teaching assignments for one quarter. Each student must plan carefully during the first three years of college to provide for a completely free quarter to engage in full-time student teaching. Majors in elementary education will follow a plan providing for student teaching in the last quarter of the junior year or the first or second quarter of the senior year. Majors in secondary academic areas and special fields will normally be assigned to student teaching during one of the quarters of the senior year.

The assignment of each student to a school is the responsibility and prerogative of the director of field experience. Students will be assigned to one of our existing centers which are in the following areas: Belmont County, Chillicothe, Lancaster, Portsmouth, Zanesville, and Athens.

Students must secure their own housing and provide their own transportation to their assignments. Privately owned cars will be needed except by students assigned in metropolitan centers where public transportation is available. Students should not make definite plans to live in Athens during the student-teaching quarter since only a small percentage of those expressing a preference for the Athens area (commuting radius 40-55 miles) can be accommodated. The University assumes no responsibility for the transportation of students.

Prerequisites for Student Teaching

Applicants are evaluated for admission to student teaching in terms of the prerequisites described in this section. Any exceptions are the responsibility of the director of field experience. The student teaching applicant is responsible for meeting the appropriate prerequisites prior to the opening of the quarter designated for student teaching on his or her application. In addition to the prerequisites detailed herein, applicants in health, music, industrial arts, physical education, home economics, and speech and hearing therapy must have approval of the appropriate departmental head.

Enrollment in student teaching is open only to Ohio University degree candidates or to degree holders who are completing Ohio certification requirements and who will be eligible for Ohio University's recommendation for an Ohio certificate upon the completion of student teaching.

Criteria for Admission (requirements must be completed by the time a student begins student teaching, not at the time of application).

1. General requirements
 - a. Completion of at least two quarters (30 quarter hours) of residence work at Ohio University. Transfer students must complete at Ohio University at least one-fourth of the preparation in the principal teaching field.
 - b. Completion of at least 135 quarter hours with an over-all grade-point average of 2.25.
 - c. Completion of all requirements to be admitted to advanced standing in professional education (Stage II) at least one quarter prior to starting student teaching.
 - d. Completion of junior-level English composition requirement.
 - e. Completion of a significant portion (at least 75 percent) of the general education portion of the teacher education program the student is pursuing and all of the University General Education Tier I and Tier II requirements.
2. Specific requirements for elementary education
 - a. Completion of the following courses with an accumulative g.p.a. of 2.30 with a minimum grade of C- in each course:
 1. EDCI 275 or PSY 275
 2. EDEL 200, 310, 311, 321, 330, 331, 340, 350, 372
 3. EDSP 271
 4. EDEL 200L, EDSP 160, EDCI 401
 5. EDEL 310L, 311L, 321L, 330L, 331L, 350L
 - b. Completion of ART 360, MUS 161, and JPES 270.
3. Specific requirements for kindergarten certification
 - a. Completion of all special requirements for elementary education (see 2 above).

- b. Completion of the following course with a minimum grade of C-:
EDEL 306
- c. Satisfactory completion of one full quarter of student teaching in elementary education.
4. Specific requirements for special education
 - a. Completion of all courses in blocks I, II, III, IV, and V with an accumulative g.p.a. of 2.30 with a minimum grade of C- in each course.
 - b. Completion of all field experience courses required in blocks I, II, III, IV, V and EDCI 401 with an accumulative g.p.a. of 2.30 with a minimum grade of C- in each.
 - c. A positive recommendation from the faculty members coordinating block III, IV, and V based upon review by all faculty teaching in each block.
5. Specific requirements for secondary education
 - a. Completion of the following courses with an accumulative g.p.a. of 2.30 with a minimum grade of C- in each:
 1. EDCI 275 or PSY 275, EDSE 250, 270, 351, 420
 2. EDM 480A and specific methods courses
 3. EDSE 250L, 270L, 420L, EDCI 401
 - b. Completion of a major portion (at least three-fourths—75 percent) of the work in each of the teaching fields in which the student wishes to be certified.
 - c. An accumulative g.p.a. of 2.30 must be attained in each field for which certification is sought. In the case of comprehensive majors a 2.00 accumulative g.p.a. must be attained in each of the components.
6. Specific requirements for speech and hearing therapy.
 - a. Completion of the following courses with an accumulative g.p.a. of 2.30 with a minimum grade of C- in each:
 1. EDCI 275 or PSY 275
 2. EDSP 271 or PSY 376
 3. EDSP 270, 474
 4. HSS 442
 5. EDEL 311, 311L
 6. EDGS 410
 7. EDCI 401
 - b. Completion of a bachelor's degree in Speech and Hearing Therapy and HSS 643.
 - c. A favorable recommendation from the clinical coordinator in hearing and speech science.

TEACHING CERTIFICATES

A student who plans to teach in Ohio makes application for a teaching certificate at the time of application for graduation.

Applications may be obtained from the Student Personnel Services Office, McCracken Hall. The teaching certificate is issued by the State Department of Education and qualifies the student to teach the subjects indicated on the certificate.

Completion of requirements for graduation and of the professional courses required for certification does not ensure that the individual will be recommended for certification. Instructors in various courses, and especially in courses in education and student teaching, will attempt to evaluate a student's fitness for the teaching profession in ways other than observation of academic performance in the classroom. Any reports of limitations which might tend to impair the individual's usefulness as a teacher in the public schools will be made a part of the record. When the student applies for certification this record will be examined and the question of his or her fitness for teaching will be given further consideration.

Students who are not planning to teach in Ohio should inform themselves concerning the requirements specified

by the departments of education of the states in which they expect to teach.

Reciprocity

Ohio now participates in the Interstate Agreement on Qualification of Educational Personnel and has already entered into an implementation contract with the following states:

Alabama	New Hampshire
California	New Jersey
Connecticut	New York
Delaware	North Carolina
District of Columbia	Oklahoma
Florida	Pennsylvania
Hawaii	Rhode Island
Idaho	South Dakota
Indiana	Utah
Maine	Vermont
Maryland	Virginia
Massachusetts	Washington
Nebraska	West Virginia

Major Field of Specialization

The level of preparation in the major area of specialization must correspond with the outline on the preceding pages, even though these requirements in many instances exceed those shown in the state certification regulations.

Second Teaching Field

The level of preparation in the second certifiable field must equal or exceed requirements shown in the regulations of the Division of Teacher Education and Certification of the State Department of Education. Curriculum guides for minors are available in the Student Personnel Services Office, Room 124, McCracken Hall. The following minors have been approved:

- Biological science
- Bookkeeping-basic business
- Chemistry
- Earth science

- Economics
- Educational media
- English
- French
- General science
- German
- Health education
- History
- Industrial arts
- Journalism
- Latin
- Mathematics
- Physics
- Physical education
- Political science
- Russian
- Social psychology
- Sociology and anthropology
- Spanish
- Speech

Any secondary, special field, elementary, or special education certificate can be validated to teach the following areas:

- Data processing
- Driver education
- Reading

Requirements for these validation areas may be obtained in the Student Personnel Services Office, Room 124, McCracken Hall.

PLACEMENT

The Office of Career Planning and Placement, located in Lindley Hall, offers assistance to undergraduate and graduate students and alumni of the University who are seeking educational positions.

Information concerning available teaching and administrative positions in the public schools, as well as openings in education, student personnel, home economics, counselor education, industrial arts, and physical education departments of colleges and universities of most states and many foreign countries, is disseminated through the bureau.

College of Engineering and Technology

Richard Robe, *Dean*

Joseph E. Essman, *Associate Dean*

The College of Engineering and Technology offers curricula leading to the bachelor of science degree in the departments of chemical, civil, electrical and computer, industrial and systems, and mechanical engineering, as well as industrial technology. Engineering curricula are focused on the engineering profession in which a knowledge of the mathematical and natural sciences, gained by study, experience, and practice, is applied to develop ways to utilize, economically, the materials and forces of nature for the benefit of humankind and the environment. Graduates have both the theoretical and practical training to begin professional careers or continue advanced work at the graduate level. Program flexibility is provided through options and electives so that the student may concentrate his or her studies in a chosen area within the department, or alternately use these electives in other areas such as law, business, or other professional fields.

All engineering curricula are fully accredited by the Accreditation Board of Engineering and Technology (ABET), formerly the Engineers Council for Professional Development (ECPD), the national accrediting organization for engineering programs.

The industrial technology curriculum combines courses in mathematics, sciences, and data processing with manufacturing laboratory experience to prepare graduates for responsible positions in manufacturing industries. The industrial technology program is accredited by the National Association of Industrial Technology (NAIT).

Endowments totaling ten million dollars (principally due to the late Dr. C. Paul Stocker, a distinguished alumnus) provide unique opportunities. Visiting professorial chairs, scholarships, advanced research equipment, and excellence in departments within the college are provided by these generous endowments.

With careful planning a student may, in addition to the bachelor of science degree from this college, obtain a second degree from the College of Arts and Sciences, the College of Business Administration, or the College of Fine Arts upon completion of 15 quarters in the University. (See Degree, Second Bachelor's in the *Graduation Requirements* section).

In addition to the financial aids program sponsored by the University, the College of Engineering and Technology and its departments have separately funded scholarships. The student should request information from the individual departments or from the office of the dean.

The U.S. Office of Education projections of engineering degrees indicate that, between now and 1990, the number of bachelor's graduates in engineering each year will average below the projected needs. This would include students who transfer into four-year engineering baccalaureate programs after completing two-year engineering technician programs. The nation's needs for technical expertise to help solve our energy, transportation, productivity, food, housing, and balance-of-payment problems would be prime factors for this projected need-to-supply ratio.

DEGREE REQUIREMENTS

A candidate for a degree in the College of Engineering and Technology must satisfy all of the curriculum requirements which are applicable toward a degree of his or her particular field as specified on the following pages. In addition he or she must satisfy the following:

1. A student must have a 2.0 (C) average on all courses attempted and which are applicable toward a degree.
2. He or she must have a 2.0 (C) average on all courses attempted in the College of Engineering and Technology which are applicable toward a degree.
3. He or she must have a 2.0 (C) average on all courses attempted in the major area of study which are applicable toward a degree.
4. A student must successfully complete a course by the end of the third enrollment.

Averages will be computed on final hours and points in repeated courses, if any.

ADMISSION TO ENGINEERING AND TECHNOLOGY PROGRAMS

Upon admission to Ohio University, an entering freshman who has an objective of obtaining a degree in engineering or industrial technology may request direct entry into the College of Engineering and Technology. In addition to the general requirements for admission to Ohio University, there are special requirements for all applicants seeking admission to one of the engineering degree programs. (This does not apply to industrial technology majors.)

In general, direct entry into a regular engineering degree program of the College of Engineering and Technology depends upon the qualifications and preparation of the applicant. The criteria listed below are the minimum preparation recommended for all engineering degree programs. However, when other considerations tend to discount low academic grades or college aptitude test scores, direct entrance may be requested if there is other persuasive evidence of both the capability and motivation to undertake successfully an engineering program.

Students entering as freshmen and wishing to obtain a degree in industrial technology may request direct entry into the College of Engineering and Technology. There are no additional requirements above the general University requirements listed in this bulletin.

FRESHMAN APPLICANTS

Direct Entry into Engineering Programs in College of Engineering and Technology

Recent high school graduates or transfer students, who have earned fewer than 30 quarter hours (or 20 semester hours) of credit* at Ohio University or another accredited collegiate institution, seeking direct entry admission to the College of Engineering and Technology should have the minimum credentials (or the equivalent) indicated on the Entrance Chart below.

*Semester hours can be converted to equivalent quarter hours by multiplying by a factor of 1.5 (a semester hour equals 1.5 quarter hours).

Entrance Chart

Applicants Should Meet One of Two Criteria Below

High School Subjects	CRITERIA I	High School Record	CRITERIA II	
	Units*		Test Score** (minimum)	ACT SAT
Mathematics***	3	Upper	22	1000
Chemistry****	1	1/2		
Physics****	1	of class		
English	4			

*The unit is equivalent to one academic year.

**ACT composite score or SAT combined verbal and mathematics score. (80th percentile or above in the math portion is strongly recommended.)

***This must include a minimum of Algebra I and Algebra II and geometry. A minimum of one half year of trigonometry is required, which may be part of Algebra II.

****Applicants with otherwise strong qualifications may be admitted with one unit of chemistry or physics, and the missing area completed during the first year. For these cases, it will likely require more than the standard 12 academic quarters to complete the degree program.

Applicants Not Having Minimum Preparation for Direct Entry (Engineering Programs)

Students not meeting the above minimum preparations may enter the Pre-Engineering Program in University College to develop their abilities in the areas of mathematics, chemistry, and English prior to applying for entry into the College of Engineering and Technology. Following this preparation, entry into the College of Engineering and Technology can be accomplished by earning a grade-point average of 2.0 on a four-point scale or above in each of the following group of courses and by meeting a minimum overall grade-point average of 2.0 on a four-point scale.

1. ET 180; MATH 263A, 263B
2. CHEM 121, 122, or CHEM 141, 142 as required by intended major
3. Completion of the freshman English requirement

A student entering the Pre-Engineering Program in the

University College with an intended engineering major, but who does not meet minimum preparation specified (Direct Entry into College of Engineering and Technology) will be identified as a pre-engineering major in the University College and will be assigned an engineering advisor. Students entering into one of the engineering programs in this manner may require more than the usual four academic years in order to complete the degree requirements.

A student with a record including mathematics and science courses beyond the above minimum required courses will be evaluated on the basis of his or her accumulative record and upon individual grades in English, mathematics, chemistry, physics, and engineering-related courses which the applicant may have completed at the time application is made for admission to the College of Engineering and Technology.

APPLICANT FROM ANOTHER COUNTRY

Admission of applicants from other countries will be based on official transcripts, pertinent documentation of all secondary and post-secondary work, and other evidence as required by the University and College of Engineering and Technology.

Evaluation of work and admission of applicants will be performed by the University examiner and the College of Engineering and Technology.

Applicants from foreign countries must meet the criteria given in this bulletin under Applicant From Another Country, in the *Admission and Fees* section.

TRANSFER STUDENTS

Qualified transfer students are accepted within the guidelines set forth below. Each applicant will be considered on an individual basis and entrance into the College of Engineering and Technology will be based on his or her qualifications. Transfer credits applicable to a given engineering degree are determined by the college and the program department.

Applicants for the engineering programs who have earned fewer than 30 quarter hours of credit are required to meet the minimum preparation designated for entering freshmen.

In general, transfer applicants into one of the engineering programs from other universities and colleges will be evaluated based on an applicant's accumulative grade-point average on all college work attempted and upon individual grades in English, mathematics, chemistry, physics, and engineering-related courses which the applicant may have completed at the time application is made.

Transfer applicants for the industrial technology program will be evaluated on the applicant's accumulative grade-point average on all college work attempted.

Applicants who have left other institutions for academic or disciplinary reasons will not be admitted within two calendar years following the date from which the applicant has been dropped from another university or college.

Guidelines for the entrance of transfer students into the College of Engineering and Technology follow.

Transfer from Other Universities or Colleges Outside Ohio University

Applicants from other accredited collegiate institutions are expected to have the minimum preparation set forth for entering freshmen and have earned at least a grade-point-hour ratio of 2.0 on a four-point scale. Those applicants not meeting the criteria specified for entering freshmen may be considered for admission provided they have demonstrated abilities in mathematics and science

by earning a minimum of 2.0 on a four-point scale, in all mathematics and science courses attempted at the institution from which the student is transferring and that the student's overall grade-point-hour ratio is above the acceptable minimum level.

Applicants with credentials equivalent to those of freshmen who entered the University College (see FRESHMAN APPLICANTS) and have demonstrated abilities in mathematics, natural science, physical science, and English may be admitted to the engineering programs.

Applicants from two-year institutions following recognized and accredited University Parallel Programs will be evaluated according to the conditions stated for accredited four-year institutions.

Students transferring into one of the engineering degree programs from two-year institutions following an associate degree program in technology must have a minimum grade-point average of 3.0 on a four-point scale and indicated abilities in the mathematics and science areas.

Applicants transferring into the industrial technology program from two-year institutions must meet the minimum transfer requirements of the University as specified in this bulletin. Students transferring with two-year associate degrees into the industrial technology program can, under normal circumstances, complete the requirements for the B.S. degree with an additional two years of study.

Transfer Students from Other Colleges Within the University

Students transferring from other colleges within the University are expected to have the same preparation as entering freshmen or to have attained the equivalency of those freshmen who entered the University College and completed the specified mathematics, natural science, physical science, and English courses (see FRESHMAN APPLICANTS) with the specified grade-point average.

Transfer students not meeting the above criteria will be evaluated on an individual basis; however, they must have earned a 2.0 average or better on a four-point scale in all mathematics and science courses attempted.

Students Transferring from the Regional Campuses

Students transferring from the regional campuses who have not been admitted to the College of Engineering and Technology as entering freshmen are required to meet the same criteria set forth for students transferring from other colleges within Ohio University.

ACADEMIC REQUIREMENTS

Advising and Program Planning

The student should indicate the choice of discipline on the official application for admission to the University, assuring the assignment of a faculty advisor in the department of his or her choice. In the event a student has not decided upon the specific major within the college (area of concentration code #0910), the associate dean or the appropriate designate will serve as his or her advisor until a choice of major is made. Students in the engineering programs with demonstrated abilities in mathematics and science can readily change their majors within the college and are eligible to take courses in all colleges of the University.

Students not requesting direct entry into the College of Engineering and Technology, or not possessing the minimum preparations as indicated above, will be enrolled in

the University College. These students should read the statements included in the *University College* section of this bulletin. Each student should indicate his or her choice of curriculum on the official application to the University. This will assist in the assignment of an advisor from the University College staff and proper guidance for the student in the desired program of study. Students in University College with interest in engineering or industrial technology are encouraged to contact the various departments and/or the dean's office in the College of Engineering and Technology for information and assistance in the planning of their programs of study.

Course requirements for the freshman year in each of the engineering departments within the College of Engineering and Technology are nearly identical. Hence, while it is desirable for an engineering student to indicate a specific major field of study earlier, a student could defer a decision on a specific major field of study until the beginning of the sophomore year.

After completing one of the engineering degree programs in the College of Engineering and Technology, the engineering student is qualified to seek, by examination, registration as a professional engineer from the Board of Registration for Professional Engineers of the state in which he or she intends to practice. It is to the student's advantage to take the examination during the spring or fall quarter closest to the expected time of graduation or as soon after graduation as possible.

Graduate programs leading to the M.S. degree are available in all of the engineering programs. In addition, graduate work leading to the Ph.D. degree is available in chemical and electrical engineering with post-master's work under consideration in the other engineering departments. These programs are described in detail in bulletins issued by the Office of Graduate Student Services of Ohio University.

Cooperative Education

Cooperative education opportunities and internships are available in the departments of civil, electrical and computer, industrial and systems, and mechanical engineering, as well as the industrial technology department. Students participating in a cooperative education experience alternate working in selected industries and enrolling in a full-time academic program on campus. Students participating in this plan will require more than the normal four years to complete degree requirements.

Students interested in these programs should contact the dean's office or the department concerned.

Requirements for Continuing in the College

A student enrolled in the College of Engineering and Technology continues in his or her program unless there is demonstrated weakness in the mathematics, science, and engineering-related subjects, which would indicate his or her inability to meet the academic requirements of the program. The associate dean and department chairperson will make decisions concerning cases of this nature, and the student will be notified accordingly.

In addition to the above overall performance, the specific requirements listed under (A) Deficiency Points and (B) Repeated Courses must be met.

A. Deficiency Points

A student enrolled in the College of Engineering and Technology continues in his or her program in a normal manner provided:

1. He or she maintains an average of 2.0 (C) or better in all hours attempted at Ohio University which are applicable toward a degree.

2. He or she maintains an average of 2.0 (C) or better in all hours attempted in the College of Engineering and Technology that are required for graduation (including technical electives).

3. He or she maintains an average of 2.0 (C) or above in all courses attempted in his or her major area of concentration that are applicable toward the degree.

Averages in any of these categories below 2.0 (C) result in deficiency points and probation. The academic record of a student who is on probation or who acquires deficiency points in any quarter is reviewed by the student's department chairman and by the associate dean of the college to determine if such student may continue in the program. A student who is placed on University probation at the end of any quarter must earn a minimum of nine quarter hours of credit with a 2.0 (C) or better average in his or her next quarter of attendance or be dropped from the University. These credits must be in courses directly applicable to the degree requirements. In the subsequent quarter the student's academic progress must be such that he or she is eligible to be removed from probation or the student will be dropped from the University. Students who are placed on college or departmental probation at the end of any quarter must receive a 2.0 (C) average or better in subsequent quarters in their engineering and technology and/or major courses or they will be dropped from the College of Engineering and Technology. In addition, deficiency points in the engineering and major subjects must normally be removed within two quarters. Students on probation should discuss the matter with their academic advisors, department chairmen, and/or the associate or assistant dean of the college. Students who are dropped from the University or from the college may appeal the decision by contacting the associate dean of the college.

B. Repeated Courses

A student in the College of Engineering and Technology must succeed in a required program course by the third time he or she enrolls in the course. If the student does not meet this requirement, he or she will be dropped from his or her program. Success is a passing grade or, in those courses in which a grade of C or above is required to continue a sequence, a minimum grade of C is necessary for success.

This policy is effective fall, 1982, for all students. Repeated courses prior to fall, 1982, will not be considered in the count.

Humanities-Social Science Electives

Each major departmental curriculum includes an extensive program of study in the social sciences and humanities. Lists of courses which satisfy this requirement are maintained in each major departmental office and in the office of the dean. Courses listed under Tier II may not satisfy college requirements.

English Requirement

In addition to the curricular requirements as stated on the following pages for departments in engineering and technology, all students must also satisfy the University curricular requirements in English.

General Education Requirement

Students should plan their curricula to fulfill the University General Education requirements, as described under the *Graduation Requirements* section of this bulletin.

Pass/Fail Option

Students in the College of Engineering and Technology may elect to take courses on a pass/fail basis within eligibility requirements as stated in the *Credit and Grading* section of this bulletin.

Repeating a Course

When a course is repeated, both grades continue to be used to determine the accumulative point-hour ratio until the student applies for and completes a repeated course form available in the office of the dean. A course may not be repeated after an advanced course in the same field has been passed if the course that the student desires to repeat was a prerequisite for the advanced course.

Course Credit by Examination or correspondence may not be used to earn credit in a course required for graduation which the student has previously failed.

BACHELOR OF SCIENCE IN CHEMICAL ENGINEERING

(Major code #7251)

The chemical engineering program is planned so that its graduates are familiar with the techniques used in analyzing and solving engineering problems associated with the chemical and related industries (petroleum, metallurgical, plastics, pollution control, etc.). In addition, the program provides an excellent background for graduate study in engineering, science, business administration, law, or medicine.

Study in chemistry, mathematics, physics, and communication skills is emphasized. Courses in engineering fundamentals are introduced, followed by intensive work in engineering analysis and design. Emphasis is placed upon the application of principles from many fields of study to the solving of engineering problems. Computer solutions, process control theory, economics, and similar topics are stressed. Electives permit the student to pursue his or her interest in humanities, social sciences, and technical areas.

Freshman

Fall

ET 180 Problem Solving	3
CHEM 141 Intro. College Chem.	5
Soc. Sci. or Hum.**	8 to 10

Winter

MATH 263A Analyt. Geom. & Calc.	5
CHEM 142 Chem. Energetics	5
ET-181 Computer Methods in Engr.	4
Soc. Sci. or Hum.**	3 or 4

Spring

MATH 263B Analyt. Geom. & Calc.	5
CHEM 143 Quant. Analys.	5
INCO 103*	4
Soc. Sci. or Hum.**	3 or 4

Sophomore

Fall

MATH 263C Analyt. Geom. & Calc.	5
CHEM 305 Organic Chem.	3
PHYS 251 Gen. Phys.	5
CHE 200 Intro. Chem. Engr.	4

Winter

CHEM 306 Organic Chem.	3
PHYS 252 Gen. Phys.	5
CE 220 Statics.	4
MATH 340 Diff. Equations	5

Spring

CHEM 307 Organic Chem.	3
PHYS 253 Gen. Phys.	5
CHE 331 Prin. of Engr. Materials	4
CHEM 303 Organic Chem. Lab.	2
Soc. Sci. or Hum.**	4

*Junior**Fall*

CHE 302 Thermo-Kinetics I	5
CHE 342 Unit Oper. I	5
CHE 418 Materials Lab.	2
CHEM 453 Phys. Chem.	3
Chem. Eng. or Tech. Elec.	3 to 5

Winter

CHE 303 Thermo-Kinetics II	4
CHE 344 Unit Oper. III	5
CHE 363 Synthesis & Analys.	3
CHEM 454 Phys. Chem.	3
Soc. Sci. or Hum.**	3 to 5

Spring

CHE 304 Thermo-Kinetics III	4
CHE 400 Appld. Chem. Calc.	5
CHEM 455 Phys. Chem.	3
CHEM 456 Phys. Chem. Lab.	3
CHE 343 Unit Oper. II	4

*Senior**Fall*

CHE 415 Lab III-Unit Oper.	3
CHE 442 Proc. Control	4
CHE 443 Design	5
EE 313 Basic Elec. Engr. I	3
Chem. Eng. or Tech. Elec.	

Winter

CHE 417 Lab V-Proc. Control	2
CHE 444 Design	4
CHE 480 Colloquium	1
EE 314 Basic Elec. Engr. II	3
OR	
EE 315 Basic Elec. Machines	3
Technical Elective***	3
Soc. Sci. or Hum.**	4

Spring

CHE 416 Lab IV-Unit Oper.	3
Chem. Eng. Elec.	3
Technical Elective***	6
Soc. Sci. or Hum.**	3

The program listed above contains the minimum of 202 hours of required courses for the degree.

*May be taken in any order.

**Note that, in general, courses outside the chemical engineering sequence can be taken at any time provided prerequisites have been met. A minimum of 24 hours must be taken in social studies and humanities, with at least nine hours in each area and adherence to the University General Education requirements.

***Minimum list available in departmental office. These are courses in the areas of engineering, chemistry, mathematics, and physics. Minimum of 3 Chem. Eng. and 9 Tech. Elect. hours required.

BACHELOR OF SCIENCE IN CIVIL ENGINEERING

(Major code #7252)

The civil engineering curriculum is designed to give the student a broad understanding of the basic physical sciences and mathematics. It provides a knowledge of civil engineering principles and practice in the areas of (1) engineering materials, including fluids and soils; (2) de-

sign of highways and other transportation facilities, including traffic control systems; (3) design and construction of structures of all types; and (4) environmental sanitation with particular emphasis on water supply and wastewater disposal. The curriculum also is designed to enhance the student's understanding of the world and its culture by introducing him or her to university-level study in humanities and social science.

Civil engineers are primarily responsible for planning the design and construction of all the nation's constructed facilities. They plan, produce, and help operate the nation's transportation system. They must develop yet conserve water resources. They have a large role in designing the country's environmental protection relating to water, air, and solid wastes. They are involved in housing and urban development. They study the earth's soils and oceans to serve people better.

Graduates are prepared to go on to advanced study or to find employment with consulting engineering firms, private corporations, or government agencies.

A co-op program is available for qualified civil engineering students who have completed their sophomore year. This would enable them to obtain technical experience and income by working for private or government organizations while completing their academic studies. The junior and senior course requirements would then take a minimum of three years for completion, with co-op work and courses taken in alternate academic quarters. Students interested in the co-op program should consult with the department chairman.

Freshman

The following courses should be completed during the first year: CHEM 121, 122, 123 Gen. Chem.

ET 180 Problem Solving, MATH 263A, MATH 263B Geom. & Calc.

ET 181 Computer Methods

IT 101 Engr. Drawing

Freshman English composition, as recommended by English Department

ET 106 Engr. & Technology

INCO 103 Pub. Spkng.

CE 210 Plane Surveying

Take additional social science and humanities electives to complete schedule each quarter.

*Sophomore**Fall*

MATH 263C Geom. & Calc.	5
CE 220 Statics.	4
IT 121 Descr. Geom.	3
PHYS 251 Physics	5

Winter

ET 240 Intro. to Computers	4
ME 224 Dynamics	4
PHYS 252 Physics	5
Elective	

Spring

MATH 340 Diff. Equations	5
CE 222 Strength of Materials	4
CE 223 Strength of Materials Lab.	1
PHYS 253 Physics	5

*Junior**Fall*

CE 330* Struct. Theory I	5
CE 340 Fluid Mechanics	5
CE 341 Fluid Mechanics Lab.	1
GEOL 283* Geol.	5

Winter

CE 370* Soils	4
ME 321 Thermodynamics	4
CE 311* Route Engr.	4
ISE 304 Statistics	3

Spring

CE 342* Appld. Hydraulics	3
CE 343* Hydrology	3
CE 361* Transportation	4
CHE 331 Prin. of Materials	4
Junior English composition, as required by English Department.	

Senior

Fall

CE 450* Water Treatment	3
EE 313 Basic Elec. Engr. I	3
Elective	

Winter

CE 432* Concrete Design	4
CE 451* Wastewater Treatment	3
EE 314 Basic Elec. Engr. II	3
OR	
EE 315 Basic Elec. Machines	3
Elective	

Spring

CE 433* Steel Design	4
Electives	

*Course offered only during quarter shown.

Above list shows only courses specifically required for a civil engineering degree. In addition to these, 24 credit hours are required in the humanities and social sciences with no fewer than eight in either field. A list of acceptable electives is available in the civil engineering office.

Also, in addition, any three civil engineering courses taken from the list below are required: fall quarter — CE 471 Found., CE 424 Str. Mtls., CE 452 Wtr. Anal.; winter quarter — CE 331 Struct. Th., CE 415 Photo., CE 457 Wtr. Res., CE 462 Traffic; spring quarter — CE 434 Struc. Des., CE 481 Pavement Design, CE 410 Surveying II.

Qualified students may, with the permission of the instructor, substitute certain graduate-level courses for the foregoing civil engineering electives.

Additional 12 hours of any approved engineering, science, or other elective courses are also required as open electives.

A list of acceptable courses for these is available in the civil engineering office. A minimum of 192 quarter hours of credit is required for the degree. Students also must satisfy University General Education requirements (see the *Graduation Requirements* section of this catalog).

BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING

(Major code #7253)

The Department of Electrical and Computer Engineering is located in Clippinger Research Laboratory, a modern facility housing undergraduate, graduate, and research activities of the department. The department is the beneficiary of a major endowment from the late Dr. C. Paul Stocker, an electrical engineering alumnus. This endowment is providing support for facilities and a level of excellence equal to those of major departments of electrical and computer engineering in this country.

Electrical engineering addresses the wide application of electrical and electronic phenomena to real-world needs, from consumers to space exploration. It encompasses such diverse areas as research, development, design, sales, and operation of electrical and electronic systems. Areas of specialization include such varied fields as circuit design, communications, computers and automata, control systems, electromagnetics, energy sources and systems, power transmission and distribution, electronics, and instrumentation. For students with an interest in

digital computers, there are computer engineering courses in the department on programming, digital circuits, and computer design and outside courses related to software engineering.

Electrical engineering graduates hold numerous challenging positions in many nonelectrical industries such as chemical, nuclear, automotive, medical, textile, petroleum, and transportation, to name only a few, as well as positions in electronics, communications, power, control, and other electrical industries. The job functions performed by electrical engineering graduates include many diverse activities, such as research, development, design, production and manufacturing, and consulting.

Following a freshman year which is essentially common to all engineering degree programs, the electrical engineering student is promptly introduced to digital computers and modern electronic instrumentation. The remainder of the sophomore year and the junior year provide a solid analytical foundation for all of the various electrical engineering specialties. The senior year provides an opportunity for the student to specialize in those areas he or she finds most interesting. Courses may be chosen from communications, power systems and energy conservation, network theory, electronics, avionics, electromagnetic fields, computer systems, control systems, and others. For students seeking greater depth or breadth, electrical engineering offers programs leading to the M.S.E.E. and Ph.D.

Students may earn internship credit by participating in approved internship programs with industry. Approved internships may be applied toward the graduation requirement.

Ohio University is unique in offering an option in avionics engineering. Recognition of our graduates by government and industry means employment opportunities in a dynamic, exciting technical-specialty field. Courses which are part of the avionics curriculum include digital technology, control, circuits, electronics, electromagnetics, and communications as basic elements.

The Ohio University Avionics Engineering Center is extraordinary in providing undergraduate electrical engineering majors direct field and laboratory experience on real-world avionics projects sponsored by federal agencies and industry. Internship course credit can be granted for laboratory work performed, and a number of part-time jobs are supported for qualified students. Interns work directly with the professional faculty and staff on a variety of projects involving instrument landing systems, navigation processors, test flight evaluation, and low frequency navigation sensor systems. A recommended list of technical elective courses is available at the center.

Freshman

Fall

ET 106 Engr. & Tech.	1
ET 180 Problem Solving	3
CHEM 121 Intro. to Chem. or CHEM 141 ²	4
Electives ¹	6-9

Winter

MATH 263A Analyt. Geom. & Calc.	5
CHEM 122 Chem. of Solutions or other natural science ²	4
IT 101 Engr. Graphics ³	3
Elective ¹	3-5

Spring

MATH 263B Analyt. Geom. & Calc.	5
CHEM 123 Environ. Chem. or other natural science ²	4
INCO 101 Fundamentals of Speech	3
OR	
INCO 103 Pub. Spkng. ³	4
ET 181 Computer Methods in Engr. I	4
Freshman English Composition ⁴	

Notes on freshman year:

1. Electives in the freshman year are normally taken in the humanities/social sciences area. Exceptions must be approved by a faculty advisor.
2. Alternatives to chemistry must both be in the same area. Approved areas are life-sciences (zoology and botany) and earth sciences (geology), as follows: Natural Science alternatives for CHEM 121, 122, 123 are:
CHEM 141, ZOOL 150, ZOOL 151
CHEM 121 or 141, BOT 110, BOT 111
CHEM 121 or 141, GEOL 283 and either GEOL 211 or 270.
3. There is no preferred order on IT 101 and INCO 101/103.
4. The freshman English composition requirement may be satisfied in any quarter of the freshman year. ENG 151, Fr. Comp.: Wrting. & Rhet., is preferred.

Sophomore

Fall

MATH 263C Analyt. Geom. & Calc.	5
PHYS 251 Gen. Physics	5
EE 210 Circuit Analys. I	4
ET 240 Intro. to Dig. Comput. Solution of Engr. Prob.	4

Winter

MATH 340 Diff. Equations	5
PHYS 252 Gen. Physics	5
EE 211 Circuit Analys. II	4
EE 221 Inst. & Comp. Lab. II	3

Spring

EE 212 Circuit Analys. III	4
EE 222 Intro. to Digital Systems	3
EE 232 Analyt. Found. of Elect. Engr.	5
Elective ⁵	3-5

Junior

Fall

EE 301 Interim. Lab I	1
EE 310 Linear Systems & Networks I	4
EE 330 Energy Conversion I	4
EE 340 Electronics I	4
Elective ⁵	3-4

Winter

EE 302 Interim. Lab II	1
EE 321 Electromagnetics & Materials I	4
EE 331 Energy Conversion II	4
EE 341 Electronics II	4
Elective ⁵	3-4

Spring

EE 303 Interim. Lab. III	1
EE 312 Linear Systems & Networks III	4
EE 322 Electromagnetics & Materials II	4
EE 320 Distributed Circuits	2
Elective ⁵	4-6
Junior English composition ⁶	

Notes on sophomore and junior years:

5. These elective spaces should be utilized to satisfy requirements CE 220, CE 222, ME 321, and PHYS 316 (students should complete EE 321 before enrolling in PHYS 316). Additional available time may be applied toward satisfaction of humanities/social sciences requirements.
6. The junior English composition requirement may be satisfied in any quarter of the junior year. ENG 305J, Technical Writing, is preferred.

Senior

Fall

EE 401 Adv. Lab ⁷	1-3
Technical Elective ⁸	9
Elective ⁹	5-7

Winter

EE 402 Adv. Lab II ⁷	1-3
Technical Elective ⁸	6
Elective ⁹	8-9

Spring

EE 403 Adv. Lab III ⁷	1-3
Technical Elective ⁸	6
Elective ⁹	8-9

Notes on senior year:

7. Total senior lab (EE 401, 402, 403) requirement is five hours, with a minimum of one hour in each quarter and three different areas represented among the total of five hours. Only one hour of senior lab should be registered under any one call number.
8. Senior technical electives are normally 400-level EE courses, although a few alternates are acceptable on special programs with the approval of the faculty advisor. Total technical elective requirement is 21 hours minimum.
9. May be divided between humanities/social science electives (consult departmental office for acceptable courses) and free electives subject to these requirements:
 - a. humanities/social science hours total (over four years) is 25 hours minimum, with no fewer than eight hours in either area;
 - b. total program earned hours minimum is 196 hours including the freshman and junior English composition courses.

Students transferring from other institutions should consult with the EE office to determine the remaining requirements for the completion of the degree.

BACHELOR OF SCIENCE IN INDUSTRIAL AND SYSTEMS ENGINEERING

(Major code #7255)

Industrial and systems engineers obtain a broad technical background with special attention to productivity, costs, quality, and the human factor in production and other systems. They design and supervise installation of facilities for production of goods and services including the layout of buildings, machines, and equipment, taking into account such vital factors as ecology, energy conservation, safety, and health. They also design and supervise installation of computer systems with applications to production, marketing, banking, and health care. Industrial and systems engineers develop performance measures and standards for equipment, workers, and factories to achieve more effective utilization; and they translate technical designs of other fields of engineering and science into production or other practical applications.

Courses in the first two years of the program are similar to the curricula of other engineering departments, and provide the necessary foundation in basic subjects upon which advanced engineering work depends. The last two years of work provide the professional-level material, including computer-related instruction, necessary for the interdisciplinary activities that are required of the modern industrial or systems engineer.

Industrial and systems engineers follow careers in many fields: manufacturing, transportation, and government; and for those interested in computers and information processing: banking, insurance, and hospitals. Many industrial and systems engineers move into management positions after a few years of experience. Salaries are excellent and jobs are plentiful. The U.S. Department of Labor statistics show that there will be, on the average, two job openings for every industrial engineer graduating in the foreseeable future.

Freshman

Fall

ET 106 Engr. & Tech.	1
ET 180 Problem Solving	3
CHEM 121 Intro. to Chem.	4
OR	
CHEM 141 Intro. to College Chem.	5
IT 101 Engr. Drawing	3
English composition	5

Winter

MATH 263A Analyt. Geom. & Calc.	5
CHEM 122 Chem. of Solutions	4
OR	
CHEM 142 Chem. Energetics	5
INCO 103 Pub. Spkng.	4
ECON 102 Prin. Microeconomics	4

Spring

MATH 263B Analyt. Geom. & Calc.	5
MATH 211 Elem. Linear Algebra	5
ET 181 Computer Methods in Engr. I	4
IT 101 Engr. Drawing	3
IT 117 Engr. Metals	3

Sophomore

Fall

MATH 263C Analyt. Geom. & Calc.	5
PHYS 251 Gen. Physics	5
CE 220 Statics.	4
ISE 231 Intro. to Indust. & Systems Engr.	2

Winter

MATH 340 Diff. Equations	5
PHYS 252 Gen. Physics	5
ACCT 201 Financial Acct.	4
ET 240 Intro. to Comput. Solutions	4

Spring

PHYS 253 Gen. Physics	5
ISE 304 Appld. Engr. Stat.	3
CE 222 Strength of Materials	4
ISE 330 Engr. Economy	3

Junior

Fall

ISE 305 Engr. Statistics I	3
ISE 333 Work Design	5
ME 224 Dynamics	4
CE 223 Strength of Materials Lab.	1
Electives*	

Winter

ISE 306 Engr. Statistics II	3
ISE 415 Intro. to Systems Engr.	3
ISE 435 Quality Control	3
EE 313 Basic Elec. Engr. I	3
ENG 305 Tech. Wrtng.	4
Electives*	

Spring

ISE 448 Human-Machine Systems	3
CHE 331 Prin. of Engr. Materials	4
ME 321 Intro. to Thermodynamics	4
EE 314 Basic Elec. Engr. II	3
OR	
EE 315 Basic Elec. Engr. III	3
Electives*	

Senior

Fall

ISE 432 Inventory Control I	3
ISE 441 Oper. Research	3
ISE 445A Systems Design I	3
Electives*	

Winter

ISE 440A Indust. Plant Design I	2
ISE 433 Indust. Computer Applic.	5
Electives*	

Spring

ISE 445B Systems Design II	3
ISE 440B Indust. Plant Design II	3
Electives*	

University English composition requirements must be met. Any courses taken in fulfillment of these requirements can be counted as free electives as defined below.

*A minimum of 49 hours of electives is required including

—22 hours in social science and humanities with at least eight hours in each area and at least one sequence of eight hours or more within a single department

—6 hours in industrial and systems engineering

—3 hours in the physical or life sciences chosen from CHEM 123 or 143, PHYS 316, GEOL 283, ZOOL 150

—3 hours in the engineering sciences

—3 hours of electives may be freely chosen

Students with an interest in the life sciences should consult with their ISE advisors about substituting up to 10 hours of life science courses for required physical science courses.

Students may specialize in one of a wide variety of fields by the proper choice of electives. We urge students to come to their advisors or the department office for detailed information about electives.

MINING SYSTEMS ENGINEERING OPTION

Students may earn a bachelor of science degree in industrial and systems engineering with a concentration in mining systems engineering. The program prepares engineers to enter the mining industry, which is extremely important to the U.S. Mining systems engineers would be involved in production methods, planning for mining operations, project engineering, and mine management. Job opportunities are plentiful.

About one-half year of the program may be taken in other educational institutions with specialized mining programs. These courses are in mining fundamentals, mine ventilation, surveying, mine material handling, and mine design. The balance of the program is taken at Ohio University. Students who have earned a mining technology associate degree may be able to transfer as much as two years credit towards the bachelor degree and are especially encouraged to apply. For more information write to: Mining Systems Engineering Program, Department of Industrial and Systems Engineering, Ohio University, Athens, Ohio 45701-2979.

Mining Systems Option Requirements:

Required Engineering Courses, 81 hours:

CE 210 Plane Surveying	4
ISE 2XX Mining Fundamentals	3
ISE 3XX Mining Material Handling System	3
ISE 3XX Mine Ventilation Systems	3
CE 350 Mechanics of Mine Design	4
ISE 419 Explosives	3
ISE 4XX Mine System Design I	3
ISE 450 Mine System Design II	3
CE 220, 222, 340 Mechanics	13
EE 313 Basic Elec. Engr.	3
ISE 305, 306 Engineering Statistics	6
ISE 330 Engineering Economy	3
ISE 333 Work Design	5
ISE 432 Inventory & Mfg. Control	3
ISE 433 Computer Simulation	5
ISE 441 Operations Research	3
ISE 448 Human-Machine Systems	3
ME 224 Dynamics	4
ME 321 Thermodynamics	4

Elective Engineering Courses: 9 hours chosen from:

CHE 300 Fossil Fuel Analysis	4
ISE 4XX Underground Mine Planning	3
ISE 4XX Surface Mine Planning	3
ISE 4XX Rock Mechanics	3
ISE 4XX Mine Systems Analysis	3
ISE 4XX Advanced Ventilation Design	3

ISE 4XX Advanced Geostatistics Applications in Mining	3
Mathematics, 25 hours:	
MATH 211 Elem. Linear Algebra	5
MATH 263A, 263B, 263C Analyt. Geom. & Calculus	15
MATH 340 Differential Equations	5
Science, 27 hours:	
CHEM 141 Intro. to College Chem.	5
PHYS 251, 252, Gen. Phys.	10
Geological sciences electives chosen from GEOL 283, 310, 314, 315, 330, 350, 353	12
Basic Skills, 23 hours:	
ACCT 201 Financial Acct.	4
ET 106 Engr. & Tech.	1
ET 180 Problem Solving	3
ET 240 Computer Solutions	4
INCO 103 Public Speaking	4
IT 101 Drawing	3
MGT 325 Commun. Behavior	4
Humanities and social science electives, 25 hours	
Free electives, 9 hours	
TOTAL: 199 hours	

BACHELOR OF SCIENCE IN INDUSTRIAL TECHNOLOGY

(Major code #7256)

This program is designed to prepare personnel for responsibility in production areas of the manufacturing industry. Typical positions available to industrial technology graduates relate to production supervision, process engineering, maintenance, and related areas. A minimum of 192 quarter hours, which includes all specified degree requirements, is necessary for graduation.

Courses in mathematics, sciences, and data processing are included in order to build channels for communication with engineering personnel. Management-oriented courses are provided to assist in developing understanding of the industrial environment. Special emphasis is placed upon procurement of technical knowledge related to drafting, electronic and fluid power control, common materials, and the techniques available for forming, machining, and joining the materials of industry.

Alternate fields of specialization are available according to the selection of restricted electives.

Two-year A.A.S. degrees in industrial technology with manufacturing and design options are available at the Ohio University Lancaster campus.

DEGREE REQUIREMENTS

1. Required IT Courses: 60 hours

IT 101 Engr. Drawing	3
IT 102 Engr. Drawing	3
IT 115 Metal Fabrication	3
IT 117 Engineering Metals	3
IT 221 Power Transmission	3
IT 260 Line Supervision	3
IT 308 Plastics	4
IT 310 Metal Casting	5
IT 312 Metals Production	3
IT 320 Hydraulic Controls	3
IT 332 Electronics	5
IT 351 Jigs and Fixtures	3
IT 399 Materials	3
IT 435 Machine Control	3
IT 452 C.A.M. (computer-aided mfg.)	4
IT 462 Product Manufacture	5
IT 483 Safety Programs	4

2. Required IT Electives: 12 hours

The following IT courses are acceptable: 104, 105, 121, 122, 201, 301, 302, 309, 311, 312, 315, 318, 319, 321, 323, 336, 342, 350, 351, 361, 363, 395, 396, 413, 435, 436, 443, 483, 484A, 490.

The following IT courses are *not* acceptable: 080, 109, 200, 360, 380, 381, 391, 465A-P, 470, 471, 472, 484B.

3. Required Non-IT Courses: 87 hours

- English proficiency: 5 hr. freshman, 5 hr. junior (IT 370 required for juniors unless the student passes the proficiency exam.)
If student passes proficiency exam then hours are added to free electives.
- Gen. Educ: 12 hrs. selected from any three of the following areas:
Comparative arts, foreign languages, philosophy, anthropology, sociology, humanities, or English literature (Courses taken for the English proficiency requirement do not count for English literature.)
- MATH 118, 163A
- INCO 103
- CHEM 121, 122
- PHYS 201, 202
- ECON 103
- PSY 101, 121
- ACCT 201
- MKT 301
- MGT 200
- HRM 425
- ET 106

4. Required Area of Specialization — 3 Options: 20 Hours

Select courses at the 200 level or above from one of the following options:

- Management Option: 20 hours
Business Adm, QBA, MKT, or MGT (MGT 300 not acceptable)
- Technical Option: 20 hours
Engr, Math, Comp. Science
- Industrial Arts Education Option: 38 hours (approx) Look under the *College of Education* listing in this catalog for required courses.

5. Free Electives: 13 hours

If student passes English proficiency exam then hours are added to free electives.

FIRST-YEAR PROGRAM

The following courses are suggested as suitable for the first year. All will apply for full-credit regardless of program option selected at a later date. Each student should make an appointment at the department office to discuss the program before enrollment beyond the first year.

Fall

IT 117 Metal Fabrication	3
CHEM 121 Prin. of Chem.	4
IT 101 Engr. Drawing	3
MATH 118 Applied Math	4
INCO 103 Fundamentals of Speech	3
	<hr/> 17

Winter

IT 102 Engr. Drawing	3
CHEM 122 Prin. of Chem.	4
ECON 103 Prin.	4
MATH 163A Intro. to Calc.	4
	<hr/> 15

Spring

IT 117 Engineering Metals-Machining	3
ACCT 201 Financial Acct.	4
PSY 101 Gen. Psych.	5
English proficiency	5
	<hr/> 17

TRANSFER STUDENTS

A program is available for students who transfer credits earned while obtaining their associate degrees in some field of engineering technology from another approved school. Those accepted into this program are assigned junior standing and are furnished checksheets showing the remaining hours of upper-level requirements specified for attainment of the bachelor's degree.

TEACHING INDUSTRIAL ARTS

Students who desire to teach industrial arts must enroll in the College of Education. Requirements for this degree are listed in the *College of Education* section of this catalog.

A teaching option is provided under the industrial technology program through utilization of both associated and unrestricted electives to satisfy requirements for certification. Students interested in this option should declare their intent no later than the first quarter of the junior year in order that exact requirements can be determined and scheduled prior to graduation.

TEACHING DRIVER EDUCATION

Specialized courses in driver and safety education, as required for teacher certification, are provided by the Department of Industrial Technology. Those wishing to obtain this certification should check at the College of Education to learn the specific requirements for their programs.

BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING

(Major code #7257)

Mechanical engineering is concerned with (1) the economical and ecological conversion of energy from natural sources to provide power, heat, cooling, and propulsion; (2) the design of all types of machines, engines, and vehicles; (3) the processing of materials into useful products; and (4) the development of systems for using machines and resources. Professional areas include research, development, design, testing, production, operation and maintenance, marketing and sales, and administration.

The curriculum provides the versatile academic preparation required to enter the profession and the fundamentals of a liberal education. Theoretical analysis, practicality, laboratory skills, and design synthesis are all provided by elective courses during the senior year.

Students majoring in mechanical engineering as preparation for entry into other professions such as law, medicine, business, etc., should consult with the department chairman regarding schedule modification required to meet specific career objectives.

The Mechanical Engineering Department offers a co-op program which allows those students who wish to do so to acquire practical experience and income by working in industry after completion of the sophomore year. Junior and senior courses are scheduled to accommodate a work-academics plan based on alternate periods of study and work. Students who are interested in the co-op program should consult with the department chairman.

Freshman

Fall

ET 106 Engr. & Tech.	1
ET 180 Problem Solving	3
MATH 263A Analyt. Geom.	5
Freshman English requirement ¹	
Hum. & Soc. Sci. Elec. ⁶	

Winter

MATH 263B Analyt. Geom. & Calc.	5
PHYS 251 Gen. Physics	5
IT 101 Engr. Drawing	3
INCO 103 Pub. Spkng.	4
Hum. & Soc. Sci. Elec. ⁶	

Spring

MATH 263C Analyt. Geom. & Calc.	5
PHYS 252 Gen. Physics	5
IT 121 Descr. Geom.	3
ET 181 Comptr. Meth. in Engr. I	4
Hum. & Soc. Sci. Elec. ⁶	

Sophomore

Fall

PHYS 253 Gen. Physics	5
CE 220 Statics	4
CHEM 141 Intro. College Chem.	5
Hum. & Soc. Sci. Elec. ⁶	

Winter

MATH 340 Diff. Equations	5
ME 224 Dynamics	4
CHEM 142 Chem. Energetics	5
Hum. & Soc. Sci. Elec. ⁶	

Spring

CE 222 Strength of Materials	4
CHEM 123 Environ. Chemistry	4
IT 117 Engineering Metals	3
CE 223 Strength of Materials Lab.	1
ME 290 Elements & Systems Lab.	2
Hum. & Soc. Sci. Elec. ⁶	

Junior

Fall

ME 301 Kinematics of Machines	3
CHE 331 Prin. Engr. Materials	4
CE 340 Fluid Mechanics	5
ME 321 Intro. to Thermodynamics	4

Winter

ME 302 Dynamics of Machines	3
ME 313 Metal Processing	3
ME 322 Intro. to Thermo. Lab.	2
ET 240 Intro. to Comput.	4
ENG 305 Technical Writing	4

Spring

ME 401 System Analysis & Controls	4
ME 328 Applied Thermodynamics	4
ME 412 Heat Transfer	4
CHE 418 Chem. Engr. Lab-Materials	2

Senior

Fall

ME 491 Mechanical Vibrations I	3
ME 403 Machine Design I	4
EE 313 Basic EE I (circuits)	3
EE 304 Basic EE I Lab	1
Technical Electives ⁵	
Hum. & Soc. Sci. ⁶	

Winter

ME 404 Machine Design II ⁴	4
ME 417 Design of Thermal Systems ⁴	4
EE 314 Basic EE II (electronics)	3
EE 305 Basic EE II Lab	1
ME 450 Computer-aided Design	4
Tier III Elective	

Spring

EE 315 Basic EE III (power)	3
ME Senior Lab ²	3
ME 480 Symposium ³	1
Technical Electives ⁵	

Notes:

1. All students must meet University freshman and junior English standards.
2. To satisfy this requirement one may select: ME 430—Applied Thermodynamics Lab (3); ME 418, 419, 420—Mechanical Engineering Experimentation (3); or ME 484—Problems in Thermal Machinery (3).
3. Attendance at the ME Symposium is required of all ME students during their last three quarters on campus. Register for final quarter only.
4. Students interested in mechanical design should enroll in ME 404 while those interested in thermal design should enroll in ME 417.
5. Nine quarter credits of technical electives are required; to be selected in consultation with your advisor.
6. Twenty-five hours of humanities and social sciences with at least nine hours in each area required. At least ten of these hours must be at or above the 300 level. The sequence must include a course in macroeconomics.

College of Fine Arts

Dora J. Wilson, *Dean*

The College of Fine Arts includes the School of Art, the School of Dance, the School of Music, the School of Theater, the Department of Comparative Arts, and the Department of Film. A broad, cultural education in the fine arts is offered, as well as specialized training in the following areas: graphic design, art therapy, art history, art education, ceramics, painting, photography, printmaking, sculpture; applied music, music education, music history and literature, music theory and composition, music therapy; acting, production design and technology, and comprehensive.

Admission Requirements

In addition to general acceptance for admission to Ohio University, students transferring from other colleges and universities are required to audition, submit a portfolio, or meet other requirements prior to final acceptance as majors in the College of Fine Arts. Applicants are advised to write for detailed information to the director of the particular program in which they are interested.

Ohio University students requesting admission into major programs of the college may also be required to meet the above criteria and should consult the appropriate director prior to arranging for transfer.

A high school applicant to Ohio University who wishes to pursue a degree program in the College of Fine Arts may apply for direct entry into the college. The applicant is strongly urged to audition if he or she desires direct entry into programs in the School of Dance, School of Music, or School of Theater. Students requesting direct entry who are not screened in this manner will be accepted into their majors on a provisional basis only. Final acceptance into a major program will require an audition or portfolio review.

Students who are uncertain about their choice of major are encouraged to delay their entry into the College of Fine Arts until they have been in attendance at the University for at least one quarter and have taken some courses in the area of primary interest.

Degrees and General Requirements

The bachelor of fine arts degree is granted upon the completion of a program in the School of Art, the School of Dance, or the School of Theater. The School of Music grants the bachelor of music degree. These degrees fulfill four functions: to provide the student with specialized

training in one of the fine arts; to provide a firm foundation for professional achievement; to provide a cultural background through a study of the relationship of all the arts; and to prepare the student, as far as possible, to become a responsible member of society. To these ends, the programs have been kept flexible to meet individual needs.

Candidates for degree programs in the College of Fine Arts must complete a minimum of 192 quarter hours with a total point-hour ratio of at least 2.0 (C). The minimum number of quarter hours for some degree programs is higher, varying according to the academic program.

The work of each student in the College of Fine Arts and its various schools will be reviewed no less than once a year by the faculty. When appropriate, the student will be notified of the faculty's assessment of his or her program and use of talent. In cases of warning or denial of further registration as a degree candidate in a specific program, the student will receive a written notice. In the event of denial, the student is still free, subject to University regulations, to change to another degree objective offered by the College of Fine Arts. If preferred, the student may apply for transfer to another academic division of the University and, subject to regulations, continue to register for coursework in the College of Fine Arts on an elective basis.

Further, a student with outstanding qualifications may request from his or her advisor consideration for acceleration by the waiver of certain required courses.

Advising

Each school in the College of Fine Arts maintains a system of academic advising for its majors, with assigned members of the faculty to serve in such capacity. The advisor keeps a current academic record for each student under his or her supervision, and is available for counseling and assisting the student in planning courses, making sure that all requirements for the major are met. Deviations from the normal course requirements, including waivers, must be approved in writing by the advisor. In some cases, additional approval by a faculty committee is required. Students are urged to meet with their advisors regularly, especially prior to registration, to ascertain that they are following an approved course of study.

In any case, each student should understand that he or she alone has the ultimate responsibility for making certain that all academic requirements for graduation are being met.

Dual Majors

In some cases, a student may wish to pursue a major in two related fields simultaneously, earning a dual major. Some courses, including electives, may be considered as satisfying a requirement in both majors, but the credit hours for each course will be tallied only once. So long as curriculum requirements are met for each major, additional credit hours are not required.

As part of any of the major programs offered by the College of Fine Arts, a student may select a minor from those offered by most departments in the University or the student may choose to complete a formal minor in business administration.

Minors

Minors are available in art, comparative arts, dance, film, music, and theater. The minors are designed for those students who are majoring in other fields but who wish, in the course of their formal education, to experience the arts. The coursework constituting the minor may be applied to a related major within the College of Fine Arts.

A student who wishes to declare a minor in the College of Fine Arts should consult with his or her major advisor; consult with an advisor within the minor program; and receive approval from the College of Fine Arts Dean's Office to pursue the program.

Any student declaring a minor within the College of Fine Arts must maintain a 2.0 G.P.A. in the minor.

Pass/Fail Option

The pass/fail option for students in the College of Fine Arts is governed by the University regulations outlined in the section entitled "Pass/Fail Option" in this bulletin.

Scholarships and Awards

There are a limited number of scholarships and awards of varying amounts available to majors in the College of Fine Arts. Some awards are renewable; others are granted on a one-time basis, renewable only at the discretion of the school involved. In all cases, technical performance is as important as academic achievement. Interested students should contact the director of the appropriate school well before January 1 so that arrangements may be made for the appropriate audition or portfolio submission.

SCHOOL OF ART

Abner Jonas, *Director*

The School of Art seeks to establish a foundation for critical thinking; to teach basic art skills and concepts; and to contribute to individual, creative growth. High standards of critical awareness are achieved through the learning of the language and theory of art, through the study of the historical development of art, and through classroom and individual critiques. Studio courses offer experience with tools and concepts leading to the acquisition of technical skills and esthetic awareness. Our programs are structured to serve individual goals and to permit personal growth; students will elect courses from throughout the University that will complement their interests. Though our program is based upon tradition, the inclusion of contemporary concepts, techniques, and attitudes forms an important part of our curriculum. Our undergraduate program is enriched by the presence of a vital graduate program.

The School of Art offers specialized training leading to the bachelor of fine arts (B.F.A.) degree in art education, art history, art therapy, ceramics, graphic design, painting, photography, printmaking, sculpture, studio arts, or visual communication (see *Institute of Visual Communication* section for program description). Many graduates become teachers; enter graduate schools; become professional artists, designers, or photographers; or enter other art-related fields.

The School of Art also offers an art minor for those who wish to develop competence in an area other than their majors.

All students planning to become art majors enter the School of Art as premajors. Transfer students may submit portfolios to areas after having completed approximately 40 quarter hours of coursework. A comprehensive selection of courses at the freshman level familiarizes students with basic art concepts and provides initial experience in a variety of specific study areas. Sophomore students usually select courses in the areas of their particular interests. Also, during the third quarter of the sophomore year, students submit a selection of work to a major area for review for acceptance as majors, *except* for students wishing to major in photography who submit portfolios for entrance into ART 295 (Intermediate Photography). At the junior level, most students will be enrolled in advanced courses in their major areas. The program for seniors includes practicum courses offering preparation for senior presentations and portfolios.

Our dedicated and experienced faculty of artist/teachers is professionally active. In addition, other artists and artist/teachers are invited to visit the School of Art for lectures, exhibits, and/or critiques. Through a series of regularly scheduled exhibits, Seigfred Gallery offers students an opportunity to see a variety of original work including a series of graduate student exhibits each spring.

Our extensive and diverse facilities enable us to offer specialized courses in a variety of areas which include, among others, hot glass, typography, stone lithography, lost-wax casting, and color photography.

Students have numerous opportunities in the school and on campus for exhibition of their works including an annual undergraduate student show, a graphic design show, and senior shows. Recognition of outstanding art students is made through the Edna Way Scholarship Fund, the Upperclass Dean's Scholarship award, the Kreckler prize, and Rogers award in art. Additional scholarships from the recently established Mary K. Leonard Art Education Scholarship and the L. C. Mitchell Memorial Scholarship will soon be available.

Students are strongly encouraged to consult regularly with an advisor concerning their selection of courses and progress toward fulfillment of degree requirements. A student may contact the School of Art advisor in Seigfred 528 or consult with the chairman of the major area. Art majors may review their own records in the School of Art office.

MAJOR AREAS AND REQUIREMENTS

Prior to graduation, all students must satisfy the requirements of Ohio University, of the College of Fine Arts, and of the School of Art. Please refer to the "Suggested Sequence of Study" pages that follow for outlines of programs fulfilling all requirements. For clarification of Tier I, II, and III courses and requirements, refer to the section of this bulletin entitled "General Education Requirement". Briefly, Tier I, II, and III state that students will earn a specific number of credit hours in the areas of English and Quantitative Skills (Tier I), Breadth of Knowledge (Tier II), and Synthesis (Tier III); lists of courses meeting requirements are available from advisors.

Art Education Major

(Major code #5122)

The B.F.A. degree program in art education serves as preparation for the teaching of art in grades kindergarten through 12. In addition to courses leading to teacher certification, the program includes extensive study in studio art and art history.

Application for admission to teacher education should be made during the third quarter of the freshman year; completion of 45 quarter hours of study including PSY 101 and a 2.0 accumulative average are required.

To become an art education major, a student must submit a portfolio of studio work for review at the end of the sophomore year. Portfolio reviews are held the first week of May.

Student teaching is normally assigned during one of the quarters of the senior year. Application for student teaching is to be made to the office of the director of student teaching no later than December 1 preceding the academic year in which the student teaching assignment is desired; a 2.25 or better accumulative average is required.

Suggested Sequence of Study

Freshman	
ART 101, 2-Dimensional Design	4
ART 102, 3-Dimensional Design	4
ART 128, Intro. to Drawing	4
ART 100, Seeing & Knowing the Visual Arts	3
PSY 101, Gen. Psych.	5
INCO 103, Pub Spkng	4
Studio Art	12
Tier I, English composition (100 level)	5
Tier I, Quantitative skills elec.	4-5
Social science	4-5
	<u>49-51</u>

Sophomore	
Studio Art	12-16
ART 254, Lettering	4
AH 211, 212, 213, Hist of Art	12
Science	5
EDCI 275, Learning Proc in the Classroom	5
OR	
PSY 275, Educational Psych	4
EDSE 250, Analys of Tchng	4
EDSE 250L, Field Exper	2
EDSE 270, Studies of Learner	3
EDSE 270L, Field Exper	1
	<u>48-52</u>

Junior	
Studio Art	20
ART 461, Art Exper in the Elem School	3
ART 462, Art Tchng in the Second School	3
Art history/comp arts elective	12
English composition (300 level)	5
EDSE 351, Instructional Proc & Curriculum	5
Tier II	4-5
	<u>52-53</u>

Senior	
Studio art	16-21
EDM 480A, Educational Media	2
EDCI 401, Urban Field Exper	2
EDSE 420, Tchng of Reading in Content Areas	4
EDSE 420L, Field Exper	1
EDCI 480, School & Society	3
EDPL 461, 463, 465, Student Tchng	16
Tier III	4-5
	<u>48-54</u>

Total minimum hours required: 196

Other requirements: 76 quarter hours of studio art including at least one course each in two-dimensional art,

three-dimensional art, and graphic design; 24 quarter hours of art history; and courses required for teacher certification. To achieve proficiency in a studio area a 36-hour, two-area concentration must be completed.

Art History Major

(Major code #5123)

The B.F.A. degree program in art history includes a concentration of courses in art history, basic and advanced studio courses, and 35 hours of nonart courses. Students are encouraged to attain a reading knowledge of at least one foreign language. Art history majors enter graduate study, seek employment in museums, or work in related fields.

Suggested Sequence of Study

Freshman	
ART 100, Seeing & Knowing the Visual Arts	3
ART 101, 2-Dimensional Design	4
ART 102, 3-Dimensional Design	4
ART 128, Intro. to Drawing	4
Tier I, English composition (100 level)	5
Tier I, quantitative skills elective	3-5
Tier II, CA 117, 118 Intro. to fine Arts.	8
Tier II elective	4-5
Electives	13-16
	<u>48-54</u>

Sophomore	
AH 211, 212, 213, Hist. of Art	12
Studio electives	12
Tier II electives	9-10
Electives	15-20
	<u>48-54</u>

Junior	
Art history	12
Studio electives	12-15
Tier I, English composition (300 level)	5
Tier II elective	5
Electives	14-17
	<u>48-54</u>

Senior	
Art history	20
Tier III, synthesis elective	4-5
Electives	24-29
	<u>48-54</u>

Total minimum hours required: 192

Electives are to include 35 quarter hours of nonart courses; attainment of a reading knowledge of at least one foreign language should be considered important; students are expected to arrange programs with advisors; selection of elective courses, in particular, should be undertaken only after consultation with an advisor.

Art Therapy Major

(Major code #5144)

The B.F.A. degree program with a major in art therapy provides a comprehensive background in art and psychology for entrance into post-baccalaureate programs offering art therapist certification (M.A. programs, clinical training programs, certification programs).

Art therapists work with individuals and groups in clinical, educational, and rehabilitative settings in psychiatric centers, clinics, community centers, nursing homes, drug and alcohol treatment clinics, schools, institutions, half-way houses, prisons, developmental centers, residential treatment centers, general hospitals, and in other locations. The art therapist integrates personal training

and experience in art and therapy with theories of human behavior, with a knowledge of visual symbol production, with an understanding of normal and abnormal behavior, with skills in intervention methods, and with creative expressions in art.

Suggested Sequence of Study

(includes tier requirements)

Freshman

ART 100, Seeing & Knowing the Visual Arts	3
ART 101, 2-Dimensional Design	4
ART 102, 3-Dimensional Design	4
ART 128, Intro. to Drawing	4
ART 105, Intro. to Painting	4
PSY 101, General Psych.	5
SOC 101, Intro. to Soc.	5
BOT 101 or ZOOL 101, Prin. of Biol.	5
Tier I, English composition (100 level)	5
Tier I, quantitative skills, PSY 121, Elementary Stat.	5
Tier II, Third World cultures or applied science	4
	<hr/>
	48

Sophomore

ART 115, Intro. to Ceramics	4
ART 191, Intro. to Photography	4
ART 141, Intro. to Printmaking	4
ART 271, Intro. to Art Therapy	5
AH 211, 212, 213, Hist. of Art	12
PSY 273, Child & Adolescent Psych.	5
PSY 226, Experimental Psych.	4
OR	
PSY 241, Behavioral Measurement	4
ART 205, Basic Painting	4
ART 232, Figure Modeling	5
	<hr/>
	48

Junior

Art history elective (300 level)	4
ART 206, Interm. Painting	4
ART 360, Art for Elem. Teachers	6
Studio electives	9
PSY 310, Motivation	5
PSY 332, Abnormal Psych.	5
PSY 333, Psych. of Personality	5
Tier I, English composition (300 level)	5
ART 371, Art Therapy	5
	<hr/>
	48

Senior

ART 461, Art Exper. in the Elem. School	3
ART 462, Art Tchng. in the Second. School	3
ART 471, Art Therapy Internship	16
Studio electives	10
PSY 351, Intro. to Clinical & Counseling Psych.	5
EDSP 272, 373, Intro. to Educ. of MR.	6
OR	
PSY 376, Psychological Disorders of Childhood	4
Tier III, synthesis elective	4-5
Electives	2
	<hr/>
	47-50

Total minimum hours required: 192

Postbaccalaureate work must be completed for registration as a certified art therapist.

Graphic Design Major

(Major code #6321)

The B.F.A. degree program in graphic design is intended to prepare professionals in the field of graphic design. Many of our graduates have acquired positions in advertising agencies; other possibilities include illustration, work in publishing houses or greeting card companies, exhibit design firms, related government positions, packaging design, and museum design.

To become a graphic design major, a student must submit a portfolio of studio work for review at the end of the

sophomore year. The professional program of study for the junior and senior years is determined through counseling. Senior major courses are individually oriented with provision for independent study. The program concludes with the preparation of a portfolio and a senior design exhibition.

Suggested Sequence of Study

Freshman

ART 101, 2-Dimensional Design	4
ART 102, 3-Dimensional Design	4
ART 128, Intro. to Drawing	4
ART 100, Seeing & Knowing the Visual Arts	3
Tier I, English composition (100 level)	5
Tier I, Quantitative skills elective	3-5
Tier II, CA 117, 118, Intro. to the Fine Arts	8
Tier II, elective	4-5
Electives	13-16
	<hr/>
	48-54

Sophomore

ART 251, Graphic Design: Typography	4
ART 253, Graphic Design: Illustration	4
ART 254, Graphic Design: Lettering	4
Studio electives	8
AH 211, 212, 213, Hist. of Art	12
Tier II electives	9-10
Electives	7-12
	<hr/>
	48-54

Junior

ART 351, Graphic Design: Typography	5
ART 353, Graphic Design: Illustration	5
ART 354, Graphic Design: Media	5
Studio electives	12-16
Art history elective (300 level)	4
Tier I, English composition (300 level)	5
Tier II elective	5
Electives	7
	<hr/>
	48-52

Senior

ART 451, 452, 453, Graphic Design: Senior Studio	15
ART 450, Design Practi.	3
Studio electives	13-15
Electives	9-12
Tier III, synthesis elective	4-5
Art history elective (300 level)	4
	<hr/>
	48-54

Total minimum hours required: 192

Ceramics Major (Major code #5127)

Painting Major (Major code #5124)

Printmaking Major (Major code #5128)

Sculpture Major (Major code #5126)

The B.F.A. degree program with a major in one studio area provides extensive study in a single medium. Studio majors become professional artists or technicians, enter graduate schools, or work in related fields.

Suggested Sequence of Study

Freshman

ART 101, 2-Dimensional Design	4
ART 102, 3-Dimensional Design	4
ART 128, Intro. to Drawing	4
ART 100, Seeing & Knowing the Visual Arts	3
Tier I, English composition (100 level)	5
Tier I, quantitative skills elective	3-5
Tier II, Comparative Arts 117, 118	8
Tier II electives	4-5
Electives	13-16
	<hr/>
	48-54

Sophomore

Proposed major	12
Studio electives	8
AH 211, 212, 213, Hist. of Art	12
Tier II electives	9-10
Electives	7-12
	<u>48-54</u>

Junior

Studio major	15
Studio electives	12-16
Art history elective (300 level)	4
Tier I, English composition (300 level)	5
Tier II elective	5
Electives	7-9
	<u>48-54</u>

Senior

Studio major	15
Major practicum	3
Studio electives	13-15
Art history elective (300 level)	4
Tier III, synthesis elective	4-5
Electives	9-12
	<u>48-54</u>

Total minimum hours required: 192

Studio Arts Major

(Major code #5118)

Students electing the Studio Arts major are to select a minimum of four courses in each of three studio areas which may include ceramics, drawing, fibers, graphic design, painting, photography, printmaking, or sculpture.

Suggested Sequence of Study

Freshman

ART 101, 2-Dimensional Design	4
ART 102, 3-Dimensional Design	4
ART 128, Intro. to Drawing	4
ART 100, Seeing & Knowing the Visual Arts	3
Tier I, English composition (100 level)	5
Tier I, Quantitative skills elective	3-5
Tier II, CA 117, 118, Intro. to Fine Arts	8
Tier II electives	4-5
Electives	13-16
	<u>48-54</u>

Sophomore

Studio art	20
AH 211, 212, 213, Hist. of Art	12
Tier II electives	9-10
Electives	7-12
	<u>48-54</u>

Junior

Studio art	27
Art history elective (300 level)	4
Tier I, English composition (300 level)	5
Tier II elective	5
Electives	7-13
	<u>48-54</u>

Senior

Studio art	31
Electives	9-12
Tier III, synthesis elective	4-5
Art history elective (300 level)	4
	<u>48-52</u>

Studio courses are to be distributed as follows:

a. 100-level courses	12
b. minimum of 4 courses in each of 3 areas (3 areas x 17 hours = 51 hours)	51
c. 300/400 level studio courses (in addition to hours required in b. above)	15
d. studio electives	12
minimum total	<u>90</u>

Total minimum hours required: 192

Photography Major

(Major code #5143)

Photography majors may concentrate in fine arts photography or in applied photography with emphasis on media and photojournalism. Students intending to major in photography should enroll in ART 191 and 192; a portfolio review is required for entrance into ART 295.

Suggested Sequence of Study

(includes tier requirements)

Freshman

ART 191, Intro. to Photog.	4
ART 192, Basic Photog.	4
ART 100, Seeing & Knowing the Visual Arts	3
ART 101, 2-Dimensional Design	4
ART 102, 3-Dimensional Design	4
Tier I, English composition (100 level)	5
Tier I, Quantitative skills	3-5
Tier II electives	4-5
Tier II, CA 117, 118, Intro. to Fine Arts	8
Electives	9-12
	<u>48-54</u>

Sophomore

ART 295, 296, 297, Interm. Photog.	15
AH 211, 212, 213, Hist. of Art	12
Studio electives	9-12
Tier II electives	9-10
Electives	4-5
	<u>48-54</u>

Junior

ART 391, 392, 393, Photog. Arts	15
OR	
ART 397, 398, 399, Photog. Commun.	15
AH 307, 308, 309, History of Photography	12
Studio electives	9-12
Art history elective (300 level)	4
Tier I, English composition (300 level)	5
Electives	3-6
	<u>48-54</u>

Senior

ART 490, Photog. Practi.	3
Photography major	15
Studio electives	12-15
Tier II elective	5
Tier III, Synthesis elective	4-5
Electives	9-11
	<u>48-54</u>

Total minimum hours required: 192

Art Minor

The art minor is offered for students not majoring in art who wish to pursue study in an area other than the major. To declare an art minor, the student is to consult with the major advisor, consult with a School of Art advisor, and receive approval from the College of Fine Arts Dean's office. A 2.0 G.P.A. must be maintained in the minor.

Requirements for an art minor are:

ART 101, 2-Dimensional Design	4
ART 102, 3-Dimensional Design	4
ART 128, Introduction to Drawing	4
AH 211, 212, History of Art	8
AH 213, History of Art	4
OR	
ART 100, Seeing & Knowing the Visual Arts	3
Two 200/300 level studio courses (with permission)	
OR	
Two 200/300 level art history courses (with permission) ...	8-10
	31-34

Minimum hours required: 31

SCHOOL OF DANCE

Gladys Bailin, *Director*

The School of Dance offers an undergraduate four-year major program leading to a bachelor of fine arts degree, which includes work in performance, choreography, the history and ethnology of dance, and the teaching of dance. There are opportunities for performances in our Putnam Studio Theater for both faculty- and student-choreographed works. Additional experience is gained from workshops and programs interrelated with the other schools in the College of Fine Arts. Visiting artists-in-residence during the academic year have choreographed works for student performances.

All transfer students intending to major in dance are required to audition as part of the admission process. An appointment for an audition and information on proficiency requirements may be obtained by contacting the director of the School of Dance. Auditions, which start in November, should be scheduled well in advance. There are scholarship auditions in November and February for incoming freshmen.

There is a growing demand for qualified graduates of dance major curricula to teach at all educational levels. Within the school, majors are encouraged to gain practical teaching experience by assisting in class instruction. The curriculum provides a foundation upon which the student may build a career as a performer, choreographer, scholar, or teacher; it also prepares him or her for advanced professional studies.

A dance minor is designed for those individuals who are majoring in other fields but who wish, in the course of their college experience, to gain an understanding of the art of dance. This program may, however, be applied toward the dance major sequence. Anyone wishing to become a dance minor must come to the School of Dance to be advised and approved. The first quarter of work is probationary. The minor program includes 30 credits, with a minimum of 9 at the 300 level or above.

Major in Dance

Freshman

DANC 101, 102, 103	21
DANC 111	2
DANC 170	4
DANC 290	2
English composition (100 level)	5
Tier I	4-5
Tier II	5-10
Electives	5-11
	48-60

Sophomore

DANC 201, 202, 203	21
DANC 212	3
DANC 312	3
DANC 331	2
DANC 441	3
Tier II	5-10
Electives	5-12
	42-54

Junior

DANC 301, 302, 303	21
DANC 431	2
DANC 440	2
DANC 442	2
DANC 471	4
English composition (300 level)	5
Tier II	5-10
Electives	7-14
	48-60

Senior

DANC 401, 402, 403	17
DANC 472	4
DANC 473	4
DANC 480	2
Tier III	4-5
Electives	12-24
	43-56

Electives should include courses in philosophy, psychology, anthropology, studio art, art history, comparative arts, film or video, music performance, music history, theater history, acting.

Total minimum hours required: 192

Minor in Dance

DANC 101	7
DANC 102	7
DANC 103	7
DANC 370	4
DANC 380	1
Dance electives	4-7
	30-33

It is strongly advised that DANC 101, 102, 103 be taken sequentially within one academic year. Under exceptional circumstances, and with faculty approval, other arrangements may be made.

SCHOOL OF MUSIC

James Stewart, *Director*

The curricula of the School of Music, culminating in the degree bachelor of music, are designed to prepare students for careers in teaching, music therapy, or performance. The School of Music makes provision for individual study in all branches of vocal and instrumental music and offers a wide range of courses in the fields of theory or composition, music history and literature, music education, and music therapy. Opportunities are provided for individual participation in student recitals as well as for performing experience in the various organizations, such as the Choral Union, the University Singers, the University orchestras, the bands, Opera Theater, and Jazz Ensembles, as well as many small chamber ensembles. Performing

groups are open to all students enrolled in the University and selection is determined by audition.

Students who specialize in music education may elect either instrumental or vocal emphasis. Upon completion of the requirements of the music education program, which includes the requirements of the State Board of Education, the student receives the Ohio Special Certificate for teaching music.

All new students intending to major in music, both freshmen and transfer students, must audition on their major instruments or voice as part of the admission process. An appointment for an audition and information concerning proficiency requirements may be secured by contacting the director of the School of Music. Those students who are accepted but do not meet the required level of proficiency in their major instruments may be placed in small classes with students of comparable ability until the required level of proficiency is reached.

A music theory examination is required of all new students. This examination is given on freshman entrance audition days and at the beginning of each quarter. Specific times and locations for this examination may be obtained from the School of Music office.

The Ohio University School of Music is a member of the National Association of Schools of Music. The requirements for entrance and for graduation are in accordance with the standards set up by the association.

The School of Music provides a Preparatory Division for precollege-age students, University students who are not music majors, and other adults. Private instruction is offered in all instruments and voice. Teachers in the Preparatory Division are either regular faculty members, graduate students, or advanced undergraduate students. Full details are available from the director of the Preparatory Division.

The School of Music offers an approved minor (30 hours minimum) in music. The minor may be earned by successfully completing the following courses: theoretical studies — MUS* 100, 101A, 102A (9 hrs); history and literature — MUS 125, 322, 323 (9 hrs); performance studies — major instrument (3 qtrs, 6 hrs), ensemble (3 qtrs, 3 hrs); and music electives (3 hrs).

Each music major is required to enroll in Performance Laboratory (MUS 90) as well as elect an appropriate performing group consistent with his or her major (see School of Music Handbook) during each quarter of residency at the University.

The following course plans outline a practical sequence of required courses which should be of assistance to the student in planning his or her course of study. All students must complete Tier I, II, and III of the University General Education requirement. (See *Graduation Requirements*.)

*MUS 101, 102, 103 may be substituted with the approval of the School of Music Academic Studies Area Chairperson.

Major in Performance

Piano

(Major code #5100)

Freshman	
MUS 101, 102, 103, Theory	12
MUS 125, Intro to Literature	3
MUS 341, Piano	12
Performance group	3
Tier I ENG, MATH	9-10
INCO 101	3
Electives	8-9
MUS 90	0

Sophomore	
MUS 201, 202, 203, Theory	9
MUS 204, 205, 206, Dictation & ET	6
MUS 321, 322, 323, Mus History	9
MUS 341, Piano	15
Performance group	3
MUS 90	0

Junior	
MUS 341, Piano	15
MUS 421C*, Chamber Music Lit	3
MUS 451, Accompanying	3
MUS 497, Recital	1
ENG (Jr Composition)	5
Tier II electives	14
Theory electives	6
Performance group	3
MUS 90	0

Senior	
MUS 341, Piano	18
MUS 452, 453, 454, Piano Pedagogy	6
MUS 421B*, Piano Mus Lit	3
MUS 497, Recital	2
Tier II elective	5
Tier III elective	4-5
Electives	8
Performance group	3
MUS 90	0

*May be taken in either the junior or senior year

Minimum credit hours required for graduation: 192

Piano with a Concentration in Pedagogy

(Major code #5100)

Freshman	
MUS 101, 102, 103, Theory	12
MUS 125, Intro to Mus Lit	3
MUS 341, Piano	12
Performance group	3
Tier I, ENG, MATH (PHIL 120)	10
INCO 101	3
Electives	9
MUS 90, Performance lab	0

Sophomore	
MUS 201, 202, 203, Theory	9
MUS 204, 205, 206, Dictation & ET	6
MUS 321, 322, 323, Music History	9
MUS 341, Piano	12
MUS 370, Practicum	6
Performance group	3
MUS 90, Performance lab	0

Junior	
MUS 341, Piano	12
MUS 452, 453, 454, Piano Pedagogy	6
Theory electives	6
Performance group	3
English composition (300 level)	5
PSY 101, 275	9
Tier II elective	4-5
Elective	3
MUS 90, Performance lab	0

Senior	
MUS 341, Piano	12
MUS 370, Practicum	6
MUS 451, Accompanying	3
MUS 421B, Lit of Piano Mus	3
MUS 459E, Class Piano Pedagogy	2
MUS 497, Recital	2
Performance group	3
Tier II elective	4-5
Tier III elective	4-5
Elective	6
MUS 90, Performance lab	0

Minimum credit hours required for graduation: 192

Voice

(Major code #5101)

Freshman

MUS 101, 102, 103, Theory	12
MUS 125, Intro to Mus Lit	3
MUS 340, Voice	12
MUS 341 or 141, 142, 143, Piano	6
Performance group	3
ITAL 111, 112, 113	12
Tier I, ENG, PHIL 120	9
MUS 90, Performance lab	0

Sophomore

MUS 201, 202, 203, Theory	9
MUS 204, 205, 206, Dictation & ET	6
MUS 340, Voice	12
MUS 341 or 241, 242, 243, Piano	6
Performance group	6
GER 111, 112	8
Tier II elective	4
MUS 90, Performance lab	0

Junior

MUS 321, 322, 323, Music History	9
MUS 340, Voice	12
MUS 458D, Solo Repertoire	1
MUS 497, Recital	1
FR 111-112	8
English Composition (300 level)	5
Tier II electives	8
Music theory and literature elective	3
Performance group	3-11
MUS 90, Performance lab	0

Senior

MUS 340, Voice	12
MUS 455, 456, Conducting	6
MUS 421A, Lit of Vocal Mus	3
MUS 421F, Lit of Opera	3
MUS 459D, Vocal Ped	2
MUS 497, Recital	2
Music theory and literature elective	5-6
Performance group	3-12
MUS electives	6
Tier II elective	4
Tier III elective	4-5
MUS 90, Performance lab	0

Demonstration of piano proficiency is required.

Minimum credit hours required for graduation: 208

Organ

(Major code #5102)

Freshman

MUS 101, 102, 103, Theory	12
MUS 125, Intro to Mus Lit	3
MUS 343, Organ	12
Performance group	3
CA 117, 118	8
Tier I, ENG, MATH	9-10
INCO 101	3
MUS 90, Performance lab	0

Sophomore

MUS 147, 148, 149, Class Voice	6
MUS 201, 202, 203, Theory	9
MUS 204, 205, 206, Dictation & ET	6
MUS 321, 322, 323, Music History	9
MUS 343, Organ	12
Performance group	3
MUS 90, Performance lab	0

Junior

MUS 343, Organ	12
MUS 402, 403, 404, Styles	
OR	
MUS 407, 408, 409, Counterpoint	9
MUS 455, 456, 457, Conducting	9
MUS 497, Recital	1
Performance group	3
Music elective	3
Tier II electives	12-15
English Composition (300 level)	5
MUS 90, Performance lab	0

Senior

MUS 343, Organ	18
MUS 421A, Lit of Vocal Mus	
OR	
MUS 421D, Lit of Orch Mus	3
MUS 421C, Lit of Ch Mus	
OR	
MUS 421F, Lit of Opera	3
MUS 421E, Lit of Organ Mus	3
MUS 497, Recital	2
Performance group	3
Tier II electives	8-10
Tier III elective	4-5
MUS 90, Performance lab	0

Minimum credit hours required for graduation: 193

Orchestral Instruments**Strings, Woodwinds, Brass, or Percussion**

(Major code #5103)

Freshman

MUS 101, 102, 103, Theory	12
MUS 125, Intro to Mus Lit	3
MUS 254*, Chamber Music	3
MUS 341, Piano	6
OR	
MUS 141, 142, 143, Piano	6
Band/Orchestra	6
Major instrument	12
Tier I, ENG, PHIL 120	9-10
MUS 90, Performance lab	0

Sophomore

MUS 201, 202, 203, Theory	9
MUS 204, 205, 206, Dictation & ET	6
MUS 254, Chamber Music	3
MUS 321, 322, 323, Music History	9
Major instrument	12
MUS 341, Piano	6
OR	
MUS 241, 242, 243, Piano	6
Band/Orchestra	6
MUS 90, Performance lab	0

Junior

MUS 254, Chamber Music	3
MUS 455, 457, Conducting	6
MUS 497, Recital	1
Major instrument	12
Music theory and literature electives	9
Band/Orchestra	6
English Composition (300 level)	5
Tier II electives	12
MUS 90, Performance lab	0

Senior

MUS 254, Chamber Music	3
MUS 304, Instrumentation	3
MUS 458, 459, Solo Rep, Pedagogy	3
MUS 497, Recital	2
Major instrument	18
Band/Orchestra	6
Tier II electives	8
Tier III elective	4-5
Elective	3
MUS 90, Performance lab	0

*12 quarters chamber music required for string majors; 9 quarters for other instrumentalists.

Minimum credit hours required for graduation: 206

Major in Theory or Composition

(Major code #5116)

Freshman

MUS 101, 102, 103, Theory	12
MUS 125, Intro to Mus Lit	3
Major instrument	6
Class Piano ¹	6
Performance group	3
Tier I, ENG, MATH	9-10
INCO 101	3
Electives	6-10
MUS 90, Performance lab	0

Sophomore

MUS 101, 102, 103, Theory	9
MUS 204, 205, 206, Dictation & ET	6
Major instrument	6
Class Piano ¹	6
Performance group	3
Tier II electives	12-15
MUS 90, Performance lab	0

Junior²

MUS 310, 311, 312, Composition	6
MUS 321, 322, 323, Music History	9
MUS 407, 408, 409 ² , Counterpoint	9
MUS 413, Intro to Electronic Mus	2
Major instrument	6
Performance group	3
English Composition (300 level)	5
Tier II electives	8-10
MUS 90, Performance lab	0

Senior

MUS 304, 305, 306, Instr, Orch	9
MUS 402, 403, 404 ² , Styles	9
MUS 410, 411, 412 ⁴ , Composition	6
MUS 414 ³ , Sr Practicum-Theory	2
MUS 421 electives	9
MUS 498 ³ , Independent Project	4
Performance group	3
Tier III elective	4-5
Electives	6-10
MUS 90, Performance lab	0

¹If piano is the major instrument, the secondary instrumental requirement may be satisfied by one of the following methods:

1. by taking applied lessons on an instrument other than piano for 6 quarters (1 hour per quarter)
2. by taking 3 quarters (2 hours per quarter) of either String Methods and Materials 261, or Wind & Percussion Methods & Materials 263, or a combination of both.

²May be taken in junior or senior year

³Required of theory majors

⁴Required of composition majors

Minimum credit hours required for graduation: 192

Major in Music History and Literature

(Major code #5114)

Freshman

MUS 101, 102, 103, Theory	12
MUS 125, Intro to Mus Lit	3
Major instrument	6
Minor instrument	3
Performance group	3
Tier I, MATH, ENG	9-10
English electives	10
INCO	3
MUS 90, Performance lab	0

Sophomore

MUS 201, 202, 203, Theory	9
MUS 204, 205, 206, Dictation & ET	6
MUS 321, 322, 323, Music History	9
Major instrument	6
Minor instrument	3
Tier II electives	12-15
Performance group	3
MUS 90, Performance lab	0

Junior

MUS 421 electives	9
Theory electives	9
Modern languages	15
Major instrument	6
English Composition (300 level)	5
History electives	8
Performance group	3
MUS 90, Performance lab	0

Senior

MUS 421 electives	9
Comparative arts electives	8
Modern languages	15
Major instrument	6
Tier II electives	8-10
Tier III electives	4-5
MUS 90, Performance lab	0

Minimum credit hours required for graduation: 202

Major in Music Education
Instrumental Emphasis

(Major code #5113)

Freshman

MUS 101, 102, 103, Theory	12
MUS 125, Intro to Literature	3
Major instrument	6
Minor instrument	3-6
Performance group	3
Music education elective	2
Tier I, ENG, MATH electives	10
PSY 101	5
INCO 103	4
MUS 90 Performance lab	0

Sophomore

MUS 201, 202, 203, Theory	9
MUS 204, 205, 206, Dictation & ET	6
MUS 261 or 263 Instr Meth Class	2
Major instrument	6
Minor instrument	3-6
Performance group	3
Music education elective	2
EDCI 275	5
OR	
PSY 275	4
EDSE 250, 250L, 270, 270L	10
Tier II electives	8-10
MUS 90, Performance lab	0

Junior

MUS 304, Instrumentation	3
MUS 322, 323, Music History	6
MUS 455, 457, Conducting	6
MUS 464, Marching Band Tech	2
Major instrument	6
Performance group	3
MUS 261 or 263, Instr Meth Classes	6
MUS 363, Instr Meth & Mat	3
Jazz elective	2
English Composition (300 level)	4
EDSE 351	5
EDSE 420, 420L	5
MUS 90, Performance lab	0

Senior

MUS 147, 148, Class Voice	4
MUS 261, or 263, Instr Meth Classes	6
MUS 413, Intro to Electronic Mus	2
Performance Group	2
Music history elective	3
Music methods elective (261, 263, 283, 366, or 468)	2-3
EDCI 480, EDM 480A, EDCI 401	7
Tier III elective	4-5
Elective	2-4
EDPL 461, 463, 465	16
MUS 90, Performance lab	0

Minimum credit hours required for graduation: 200

Demonstration of piano proficiency is required. See the School of Music Handbook for a complete statement concerning requirements.

Vocal Emphasis

(Major code #5113)

Freshman

MUS 101, 102, 103, Theory	12
Major instrument	6
Minor instrument	3-6
Performance group	3
MUS 125, Intro to Literature	3
Tier I, ENG, MATH	10
PSY 101	5
INCO 103	4
Music education elect	2
MUS 90, Performance lab	0

Sophomore

MUS 201, 202, 203, Theory	9
MUS 204, 205, 206, Dictation & ET	6
MUS 283, Rec Mus and Mat	3
Major instrument	6
Minor instrument	3-6
Performance group	3
EDCI 275	5
OR	
PSY 275	4
EDSE 250, 250L, 270, 270L	10
Tier II electives	8-10
MUS 90, Performance lab	0

Junior

MUS 261 or 263, Instr Meth Classes	4
MUS 322, 323, Music History elect	9
MUS 364, Sec Vocal Tech	3
MUS 366, Teach Mus Elem	3
MUS 455, 456, Conducting	6
MUS 468, Gen Music in JHS	3
Major instrument	6
Performance group	3
English composition (300 level)	4
EDSE 351, 420, 420L	10
MUS 90, Performance lab	0

Senior

Music Theory elective	3
Music Theory, History, Education elective	3
MUS 261 or 263, Instr Meth Class	4
MUS 413, Intro to Electronic Mus	2
Performance group	2
Tier III elective	4-5
Elective	5
EDCI 401, 480	5
EDM 480A	2
EDPL 461, 463, 465	16
MUS 90, Performance lab	0

Minimum credit hours required for graduation: 197

Demonstration of piano proficiency is required. See the School of Music Handbook for a complete statement concerning requirements.

Major in Music Therapy

(Major code #5115)

Freshman

MUS 101, 102, 103, Theory	12
MUS 141, 142, 143, Class Piano*	6
MUS 181, Intro to Music Therapy	3
Major instrument	6
Performance group	3
PSY 101	5
Tier I, ENG, PSY 121	10
EDSP 271	3
HPES 115, Rhythmics	2
OR	
Dance elective	3
MUS 90, Performance lab	0

Sophomore

MUS 125, Intro to Literature	3
MUS 147, 148, 149, Class Voice **	6
MUS 201, 202, 203, Theory	9
MUS 204, 205, Dictation & ET	4
MUS 241, 242, 243, Class Piano*	6
MUS 280, Music Therapy Practicum	3
MUS 281, Obs, Eval, Res in Mus Ther.	3
MUS 282, Music Therapy Meth & Media	3
MUS 283, Rec Mus & Mat	3
Major instrument	6
Performance group	3
Special education or behavioral science elective	3-5
MUS 90, Performance lab	0

Junior

MUS 261, Instr Meth Class	3
MUS 322, 323, Music History	6
MUS 359, 360, 361, Piano	6
OR	
MUS 459E, Class Piano Ped***	6
MUS 366, Teach Mus-Elem	3
MUS 380, Mus Therapy Practicum	3
MUS 381, Background in Mus Therapy	3
MUS 382, Mus Ther for Exc Child	3
MUS 383, Mus Ther in Psy & Rehab	3
MUS 455, Conducting	3
Music education, theory, or history elective	3
English composition (300 level)	5
General elective	2
PSY 332, Abnormal	5
IHS 108, Intro Sp Disord	5
MUS 90, Performance lab	0

Senior

MUS 263, Instr Meth Class	4
MUS 480, Mus Therapy Pract	3
MUS 481, Pro Dev/Adm in Mus Ther	3
MUS 482, Psy of Music	3

MUS 489, Clin Train in Mus Ther	1
SOC 101	5
ZOOL 101, 301	11
Tier II, special education, or behavioral science elective	5
Tier III elective	4
General electives	8
MUS 90, Performance lab	0

*Non-piano majors only

**Non-vocal major only

***For those with piano as major instrument

Minimum credit hours required for graduation: 203

The music therapy curriculum is designed to meet the degree requirements of the School of Music and the National Association for Music Therapy (NAMT).

In addition to the regular coursework, the student must complete the required course MUS 489, Clinical Experience (six-month internship) at an approved clinical training facility for the training of music therapists before graduation. Upon graduation, the student is eligible for listing with NAMT as a registered music therapist (RMT).

Minor in Music

MUS 100*	3
MUS 101A*	3
MUS 102A*	3
MUS 125	3
MUS 322	3
MUS 323	3

Performance

Ensemble

Electives

(any music course or courses totaling a minimum of 3 credit hours)

TOTAL

*MUS 101, 102, and 103 may be substituted providing the student achieves a satisfactory score on the Freshman Music Theory Entrance Exam, and has the approval of the School of Music Academic Studies Area Chairperson.

SCHOOL OF THEATER

Robert L. Winters, *Director*

The undergraduate theater experience at Ohio University is a blend of intensive training in a selected area of concentration, core theater studies, and liberal arts experiences leading to a professionally oriented bachelor of fine arts degree.

The theater is not an island unto itself, it exists as a part of and because of a larger world. For this reason, the School of Theater advisors make every effort to help theater majors satisfy the general University liberal arts requirements in a manner which encourages them to understand and contribute to people and their community. General requirements follow the guidelines established by the University General Education requirements relative to tiers I, II, and III.

All undergraduate majors devote a portion of their curricular studies to an examination of the literature and history of theater, the role of theater in society, and the relationship of theater to other art disciplines.

Majors in the School of Theater audition or interview for one of three training areas: acting, production design and technology, or comprehensive. The theater B.F.A. with an acting emphasis is offered to incoming freshmen and transfers who, through audition and interview, demonstrate potential for a performance career. The four-year curriculum is designed to provide a thorough and rhythmic development of acting skills, while allowing opportunities to explore additional options. The key to this is a

close, personal advisor-student relationship. Course offerings over the four years include a minimum of 11 quarters of acting ranging from theater games to television performance and seven quarters each of voice and movement for the stage, including mime, stage combat, and dialects.

The comprehensive major will give a student an in-depth education in all the areas of theater. In addition to the broad aspect of the major, the student can pursue specialized interest in playwriting, directing, theater management, theater education, and other areas.

The students who are accepted into this program will be expected to have exceptional skills and talents in more than one area of theater. Admission to the program will be based on recommendation(s), previous work submitted, and audition/interview.

Although the basic core of courses has been decided, the student will have the opportunity to make decisions about electives with the advice of his or her academic advisor.

There will be at the student's option the opportunity to pursue a minor in an area outside the theater curriculum.

The B.F.A. in theater is available with an emphasis on the environmental aspects of the performance. Design and technology in scenery, costumes, lighting, properties, sound, and make-up are taught in a series of courses and special projects throughout the four-year curriculum. Productions are prepared under the close personal advisement and participation of the production faculty and staff. Qualified students are challenged with major creative responsibilities.

While the requirements of the School of Theater in the humanities, sciences, and arts provide a rich environment encouraging maturity of judgment and scope of human understanding, the training prepares the qualified student to pursue further experience and education at the graduate level or in the commercial sector.

Production activities in the School of Theater are considered part of the total curriculum planning of a major, since production is, of course, ultimately the main purpose of theater training. Majors register each quarter for a production assignment or practicum. Students in the first year participate in productions through technical and management assignments, while second-, third-, and fourth-year students participate in productions as performers, advanced technicians, and managerial assistants.

Ongoing individual advising between the student and the faculty is an extremely important aspect of training in the school. The students' progress will be monitored at all times by an individual major advisor and the faculty in their major areas of interest. At the end of any quarter, if progress is unsatisfactory, the student may be recommended for transfer to another sequence or degree within the school, required to modify his or her program, or denied further enrollment as a degree candidate in the School of Theater. Through careful advising and intelligent use of all elective and University General Education course options, the students may broaden their education and explore other areas of interest. General requirements in the School of Theater follow the guidelines established by the University General Education requirement for tiers I, II, and III.

A highly motivated and talented student can pursue the above programs through the Honors Tutorial College, if the tutorial mode of instruction is appropriate for the individual student.

Candidates for degree programs in theater music complete a minimum of 192 quarter hours for graduation.

Minor in Theater

(Recommended Core)

THAR 110	4
THAR 171	5

THAR 105	2
OR	
THAR 135	2
THAR 205	2
OR	
THAR 215	2
OR	
THAR 235	2
	13

In addition to the above 13 credits an additional minimum of 17 credits must be selected from the following areas of concentration:

- Production Design & Technology Minors
- Comprehensive
- Theater Minors
- Acting Minors.

The courses included in each area are available through the Dean's Office, College of Fine Arts, or an advisor in theater.

Listed below are some of the possible areas for emphasis in the School of Theater minor and some course suggestions for these areas.

Production Design and Technology Minors

THAR 101, 102, 103 Introduction and Orientation to Theater as a Profession	9
THAR 130 Technical Production: Scenery	3
THAR 131 Technical Production: Lighting	3
THAR 132 Technical Production: Costume	3
THAR 230 Stagecraft: Scenery	3
THAR 231 Stagecraft: Lighting	3
THAR 232 Stagecraft: Costume	3
THAR 333 Theatrical Rendering	3
THAR 334 Scene Design	4
Sophomore-, junior-, and senior-level practicum courses	2-4

Comprehensive Theater Minors

THAR 101, 102, 103 Introduction and Orientation to Theater as a Profession	9
THAR 130 Technical Production: Scenery	3
THAR 131 Technical Production: Lighting	3
THAR 132 Technical Production: Costume	3
THAR 210 Acting I	4
THAR 270, 271, 272 Theater History I, II, III	9
Sophomore-, junior-, and senior-level practicum courses	2-4

Acting Minors

THAR 101, 102, 103 Introduction and Orientation to Theater as a Profession	9
THAR 210 Acting I	4
THAR 211 Acting II	4
THAR 212 Acting III	4
THAR 270, 271, 272 Theater History	9
THAR 415 Acting Practicum	2
Sophomore-, junior-, and senior-level practicum courses	2-4

Minor in Comparative Arts

CA 317	4
CA 318	4
CA 327	4
CA 328	4
CA 329	4
CA 400, Senior Seminar	3
Two courses or eight hours from	
CA 350	4
CA 351	4
CA 352	4
CA 353	4
CA 354	4

Minimum credit hours required 30

Minor in Film

Film 201	4
Film 202	4
Film 203	4
Film 240	4
Film 343	4

Film 361	5
Film 451	4
	29

INSTITUTE OF VISUAL COMMUNICATION

Charles L. Scott, *Director*

Terrill E. Eiler, *Associate Director*

The College of Fine Arts and the School of Art, in cooperation with the E. W. Scripps School of Journalism in the College of Communication, offers a visual communication degree program with eight specialized sequences. Students can earn either a bachelor of fine arts or a bachelor of science in journalism degree.

The program is designed to provide students with realistic and thorough, broad-based, professionally oriented training in visual communication, while providing the necessary liberal arts and cultural background for an equally strong foundation.

Intensive training is offered in picture editing, photo communication for newspapers and magazines, photo illustration and advertising photography, multi-media, educational media, performing arts communication, medical and science illustration, and electronic visual communication (TV news).

Goals of the Institute

The goals of the Institute of Visual Communication are (1) to equip students with the necessary skills to be successful in entry-level jobs in the media and the background and motivation to enable them to compete for eventual leadership roles in the field; (2) to provide assistance and professional guidance in visual communication to working photographers, editors, and other personnel; newspapers, press services, magazines, broadcast news operations; industrial photographic departments, trade associations, multi-media and educational media production units; and cultural and scientific visual communicators; (3) to set high standards for visual integrity and communication ethics; and (4) to foster and promote scholarly research.

The institute sponsors the Newsphoto Conference for Editors, a pioneering picture-editing workshop for word-oriented newspaper editors, founded in 1970, and still the only program of its kind. Over the years, editors from 30 states, the District of Columbia, and three Canadian provinces have attended sessions on the Athens campus. In addition, the conference has been held in Los Angeles.

Internships

In an effort to provide practical training, students are required to have at least one paid internship for a period of ten weeks during their college careers. Any qualified student may compete for an internship. Many students have several internships before graduation. In 1983, Ohio University visual communication students worked as photo interns on newspapers and in advertising studios and public relations departments in Arizona, Florida, Kentucky, Michigan, Montana, New York, Ohio, Pennsylvania, Virginia, Washington, West Virginia, and Wisconsin.

Many Ohio University visual communication students are active members of the Ohio News Photographers Association and other state press photographers groups and are student members of the National Press Photographers Association. All students are encouraged to enter news-photo competitions for which they may be eligible. Many

Ohio University students have been successful in these competitions. They have done particularly well in the annual William Randolph Hearst Foundation photojournalism competition which is open to any student taking photojournalism courses in any of the more than 80 participating colleges and universities. In recent years, Ohio University students have won first place four times; plus one second, one third, two fourth, one fifth, one sixth, and one ninth place.

Admission Requirements

To qualify for admission, a student must be of sophomore rank, pass a portfolio review, plus have a university grade-point average of 2.5, and receive a B or better in VICO 120, 121, and 122. Freshmen wishing to enter the program in their sophomore year should take visual communication 120, 121, and 122 during their first year in college.

Students must earn at least a C in all professional courses (visual communication, journalism, photography) to remain majors in visual communication.

General Requirements

All institute students are required to meet all the General Education requirements of Ohio University, including Tier I, Tier II and Tier III. In addition institute students are required to meet the requirements set down by the School of Art and the institute.

Visual Communication Core Requirements

ART 100 See-Know Visual Art	3
ART 101 2-dimen. Design	4
ART 151 Intro to Graphic Design	4
ART 397 Photo Communication	5
AH 307 History of Photography	4
VICO 120 Intro to Vis Com	4
VICO 121 Delivery Systems	4
VICO 122 Vis Com Practices	4
JOUR 221 Graphics	5
JOUR 231 News Reporting	4
JOUR 335 Picture Editing	3
JOUR 411 Communication Law	4

Students MUST pass the Journalism English Proficiency Test to take the journalism courses.

School of Art Requirements (24 hours)

AH 211	4
AH 212	4
AH 213	4
AH 307	4
AH 308	4
AH 309	4

Studio Arts (45 hours)

ART 100	3
ART 101	4
ART 151	4
ART 191 or 192	4

Photography Requirements (45 hours)

ART 295	5
ART 296	5
ART 297	5
ART 397	5

The remaining 25 hours will be completed according to your visual communication sequence.

Standards

1. Students must earn a grade of at least C in JOUR 221, 231, 325, 333, 335, 411, and 412 to graduate.
2. To qualify to take any journalism course, except JOUR 105, students must first pass an English proficiency examination. Students are urged to take the

exam as freshmen. The proficiency test may be taken no more than three times. Passing score for this test is 75. Any student who fails to pass on the first effort will be permitted to retake the exam later. Passing scores on retake examinations are 75 for sophomores and 80 for juniors and seniors.

3. To qualify for admission to JOUR 231 students must achieve at least 25 words per minute on a typing examination administered on the first day of the class.
4. To remain active in the visual communication program, a student must earn at least a C in all professional courses.
5. No professional course may be taken more than twice.
6. Students must pass a portfolio review at the end of the 300-level photojournalism courses to qualify for advancement to visual communication sequences.

Visual Communication Sequence Requirements

Picture Editing

JOUR 333* News Edit.	4
JOUR 336 Adv. Pict. Edit.	3
JOUR 412* Mass Media & Soc.	3
Journalism, photo communication or illustration, telecommunications, or graphic design upperdivision courses as electives	14
total sequence requirements	24

*These courses are included in the journalism-visual communication core.

Photo Communication

JOUR 326 Adv. Photojournalism	3
OR	
ART 398	5
JOUR 327 Color News Photo	3
OR	
ART 399	5
ART 494 Adv. Publ. Photo.	5
ART 499 Adv. Photo. Illus.	5
Journalism, photo communication or illustration, telecommunications, or graphic design upperdivision courses as electives	4-8
total sequence requirements	24

Photo Illustration

JOUR 327 Color News Photography	3
OR	
ART 399	5
ART 497 Photo Illustration	5
ART 498 Photo Illustration	5
Journalism, photo communication or illustration, telecommunications, or graphic design upperdivision courses as electives	9-11
total sequence requirements	24

Multi-media

JOUR 327 Color News Photo.	3
OR	
ART 399	5
ART 494 Adv. Publ. Photo.	5
ART 499 Photo. Illus.	5
Journalism, photo communication or illustration, telecommunications, graphic design, film, or education upperdivision courses as electives	9-11
total sequence requirements	24

Educational Media

EDAV 480 Intro. to Educ. Media	4
EDAV 481 Prod. of Instruct. Mat.	3
JOUR 327 Color News Photo.	3
OR	
ART 399	5

FILM 340 Film Techniques	3
ART 499 Photo Illus.	5
Journalism, photo communication or illustration, telecommunications, graphic design, film, or education upperdivision courses as electives	4-6
total sequence requirements	24

Performing Arts Communication

JOUR 326 Adv. Photojournalism	3
OR	
ART 398	5
JOUR 327 Color News Photography	3
OR	
ART 399	5
Theater technical production or stagecraft course	6
Journalism, photo communication or illustration, telecommunications, dance, graphic design, film, or theater upperdivision courses as electives	8-12
total sequence requirements	24

Medical or Science Illustration

JOUR 326 Adv. Photojournalism	3
OR	
ART 398	5

JOUR 327 Color News Photography	3
OR	
ART 399	5
JOUR 492 Science & Med. Rptng.	3
ZOOL 480 Microscopy & Photomicrography	3
Journalism, photo communication or illustration, telecommunications, graphic design, or film upper division courses as electives	8-12
total sequence requirements	24

Electronic Visual Communication

TCOM 106 Intro. to Telecommunications	4
TCOM 452 Elec. Newsgathering	3
OR	
JOUR 452 TV Newsfilm	3
FILM 340 Film Techniques	3
FILM 361 Motion Picture Prod. I	5
FILM 362 Motion Picture Prod. II	5
Journalism, photo communication or illustration, graphic design, or film upperdivision courses as electives	8
total sequence requirements	24

College of Health and Human Services

Hilda Richards, *Dean*

Michael Harter, *Associate Dean*

David Jacoby, *Assistant Dean*

The College of Health and Human Services was established at the Board of Trustees' meeting on January 27, 1979. The college became operational July 1, 1979, and comprises the following areas: the School of Health and Sport Sciences; the School of Hearing and Speech Sciences; the School of Home Economics; the School of Nursing, and the School of Physical Therapy.

The mission of the College of Health and Human Services is to promote an environment within which students may pursue undergraduate and graduate degrees in health and human services fields. Programs within the college combine academic classwork with practical field and clinical experiences providing students with basic knowledge, intellectual skills, and professional capabilities which enable the graduate to think and act positively and creatively in the face of ever-changing societal and human conditions.

The purposes of the College of Health and Human Services are:

1. To offer interdisciplinary programs designed for professionals with career objectives in the health and human services fields. The program is oriented toward working with people with needs typically related to such areas as aging, day care, mental health, developmental disabilities, rehabilitation, nutrition, the family, environmental concerns, social welfare, justice, adolescence and youth, and the management of human and economic resources.

2. To promote interdisciplinary research and development activities to expand the knowledge base in the health and human services fields and to disseminate information useful to theory and practice.

3. To develop effective outreach programs which contribute to the continuing education of professionals and enhance the health care and human services provided to the people in the region and the State of Ohio.

DEGREES AND REQUIREMENTS

The College of Health and Human Services offers curricula leading to a bachelor of science degree in health, hearing and speech sciences, home economics, nursing, physical education, physical therapy, and recreational studies.

Graduate programs are available as follows:

School of Health and Sport Sciences

Master in health services administration

Master in sports administration

Master of science in physical education

Master of science in exercise physiology

School of Hearing and Speech Sciences

Master of arts and Ph.D. in hearing and speech sciences

School of Home Economics

Master of science in home economics

All programs are described in detail in the *Ohio University Bulletin, Graduate Catalog*.

Each candidate for a degree in the College of Health and Human Services must earn 192 quarter hours of credit with a minimum total point-hour ratio of 2.0 (C average) and complete the major program requirements. Some major programs such as Physical Therapy have unique entrance requirements which are in addition to those which are required for admission to Ohio University. These and other specific program requirements will be found in the description of each school on the following pages.

ADVISING

A student entering the College of Health and Human Services is assigned a major advisor who is a faculty member in the school in which the major program resides. Faculty advisors assist students in the preparation of schedules and are available to discuss academic and career related topics. However, the student is responsible for completing all University, college, and school requirements for the degree.

GERONTOLOGY CERTIFICATE PROGRAM

The colleges of Arts and Sciences and Health and Human Services jointly sponsor the undergraduate Gerontology Certificate Program for students in any major program within the University who want to gain knowl-

edge and skills for a career in working with the elderly. Completion of this program is officially recognized on the student's transcript upon graduation.

See the *Courses of Instruction* section of this catalog for the Gerontology Certificate Program requirements.

SCHOOL OF HEALTH AND SPORT SCIENCES

James A. Lavery, *Director*

The School of Health and Sport Sciences has the following curricula:

HEALTH SCIENCES

- A. Health Education (Teaching Certification Program)
- B. Community Health Services
- C. Environmental Health Science
- D. Long-term Health Care Management
- E. School Nurse Program (State Certification Program)

PHYSICAL EDUCATION (K-12 Teaching Certification Program)

SPORT SCIENCES

- A. Coaching
- B. Exercise Physiology
- C. Athletic Administration

RECREATION STUDIES

- A. Therapeutic Recreation
- B. Outdoor Education
- C. Recreation Management
- D. Special Interests
- E. Wilderness Skills

ATHLETIC TRAINING (NATA Certification Program)

Upon satisfactory completion of the requirements in the major programs in the school, students may apply for the appropriate bachelor of science degree in either health, physical education, or recreation studies. A minor concentration is offered in both physical education and health education.

The school also offers the master of science degree in physical education, physiology of exercise, and the master of sports administration.

Health Education

(Major code #6837)

A major in health education prepares students for teaching in the secondary schools.

Required General Education Courses

All students in health education must complete general education courses in order to be eligible for graduation.

- 1. Science
 - ZOOL 101 Prin. of Biology 5
 - GEOL 201 or GEOG 201 Man & Phys. Envir. 4
 - CHEM 121 Prin. of Chemistry 4

- 2. Mathematics

Any course in the Mathematics Department except 011, 032, 109A, 109B, 320, and 420 is acceptable for the mathemat-

ics requirement. Also PSY 121 counts toward the mathematics requirement 5

- 3. Comparative Arts and/or Philosophy

Each student is required to complete at least two courses in this area. The two courses need not be in one field. Possibilities include any courses in the Philosophy Department; Comparative Arts Department; HUM 107, 108, 109, 307, 308, and 309; theater history courses; Art History Department; Art Department except for ART 360, 460, 461, 462; School of Music courses except for music education courses, music therapy courses, and the one- or two-hour participation courses 6

- 4. Social Studies

PSY 101 Gen Psych. 5
SOC 101 Intro. to Soc. 5

- 5. English and Interpersonal Communication

Each student is required to meet the University minimum English requirement as stated under General Education Requirement in the *Graduation Requirements* section of this bulletin. INCO 103 is a specific requirement in this area. INCO 103 may be waived on the basis of one semester of speech in high school. If waived, the course does not count as hours toward graduation, nor as a course in this area 14

Required Professional Education Courses*

EDCI 275 Learn. Proc. in Classroom	5
OR	
PSY 275 Educ. Psych.	4
EDSE 250, 250L Analys. of Teaching	6
EDSE 270, 270L Study of Learning	4
EDSE 351 Inst. Proc. & Curriculum	5
EDSE 420 Tchng. of Reading	4
EDSE 420L Reading Lab.	1
EDSE 480 School & Society (after student teaching)	3
EDM 480 Intro. to Educ. Media	2
EDCI 401 Urban Field Exp.	2
EDPL 461, 462, 465 Student Tchng.	16

Methods Course

HLTH 369 Teaching of Health	5
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Foundations of Health*

MICR 211, 212 Envir. Micro.	3-5
ZOOL 301 Human Anat.	6
ZOOL 345 Human Physiology	4
HEFN 128 Intro. to Nutrition	4
HECF 360 Human Sexuality	4
OR	
ZOOL 103	3
HLTH 202 Personal & Community Health	4
HLTH 204 Drugs, Alcohol, & Tobacco	3
HLTH 227 First Aid	3
HLTH 228 CPR	1
HLTH 370 Community Health Problems	4
HLTH 380 Safety Educ.	4
HPES 409 Tests & Measurements	4
HLTH 495 School Health Problems	5

*Subject to change.

Community Health Services

(Major code #8105)

This program provides students with background courses and field experiences which qualify them for positions in community health. A bachelor of science in health will be awarded to those students completing the prescribed course of study.

University General Education Requirements (49-50 hours)

Tier I: Quantitative Skills	4-5
(MATH 113, 117, 118, 120, 121, 151, or CS 201, ET 180, PHIL 120, PSY 121)	
English composition	5
(ENG 151, 152, or 153)	

Junior English (ENG 305J, ENG 308J, HLTH 370J, MGT 325J, JOUR 441J) 5

Tier II: Complete 30 hours from an approved list of courses in four of the following areas:
 Fine arts and humanities
 Natural science and mathematics
 Applied science and technology
 Social science
 Third World cultures

Tier III: Complete one approved Tier III course.

Foundations of Health (48 hours)

HECF 360 Human Sexuality	3
OR	
ZOOL 103	5
HEFN 128 Introduction to Nutrition	4
HLTH 101 Intro. to Health and Human Services	2
HLTH 202 Personal & Community Health	4
HLTH 204 Drugs, Alcohol, and Tobacco	3
HLTH 227 First Aid	3
HLTH 228 CPR	1
HLTH 370 Community Health Problems	4
HLTH 495 School Health Problems	5
MICRO 211, 212 Environmental Micro	5
MICRO 418 Epidemiology	4
ZOOL 301 Anatomy	6
ZOOL 345 Physiology	4

Community Health Professional Education (44 hours)

SOC 351 Elementary Research Techniques	4
PSY 275 Educational Psychology	5
EDM 480 Intro to Media	4
INCO 205 Techniques of Group Discussion	4
OR	
EDGS 440 Foundations in Group Dynamics	4
HLTH 360 Environmental Health & Safety	5
HLTH 364 Health Education Field Exp.	2
HLTH 369 Teaching of Health	5
HLTH 464 Community Health Services Practicum	15

Health Science Core (20 hours)

Students are required to select a minimum of 20 hours in Health Sciences from the following courses:

BUSL 360 Law and Health Care	4
BUSL 370 Environmental Law	4
HLTH 301 Introduction to Health Care Organ.	4
HLTH 302 Long Term Care Adm. I	3
HLTH 303 Long Term Care Adm. II	3
HLTH 327 First Aid Instructor	3
HLTH 328 CPR Instructor	3
HLTH 402 Organ. Problems in Health Care	4
HLTH 403 Long Term Care Adm. III	3
HLTH 413 Health Aspects of Aging	3
HLTH 418 Public Health Seminar	2
HLTH 418 Health of Women	3
HLTH 418 Health Practices in Rural Areas	3
HLTH 418 Health Education Workshop	2
HLTH 425 Controlling Stress & Tension	2
HLTH 491 A,B, C,D,E WkSh., Nursing Home Mgt.	1-3
SOC 231 Sociology of Health and Health Care	4
SW 290 American Social Welfare System	4

Community Health Services Option with an Emphasis in Long-Term Health Care Management

(Major code #6836)

The Long-Term Health Care Management Emphasis prepares a student for a career in the management of nursing homes and long-term care facilities. It fulfills the academic preparation necessary for the students to qualify to take the licensure examination of the Board of Examiners for Nursing Home Administration.

University General Education Requirements (49-50 hours)

Tier I: Quantitative Skills 4-5
 (MATH 113, 117, 118, 120, 121, 151, or CS 201, ET 180, PHIL 120, PSY 121)
 English composition 5
 (ENG 151, 152, 153)
 Junior English: (ENG 305J, ENG 308J, HLTH 370J, MGT 325J, JOUR 441J) 5

Tier II: Complete 30 hours from an approved list of courses in four of the following areas:
 Fine arts and humanities
 Natural science and mathematics
 Applied science and technology
 Social science
 Third World cultures

Tier III: Complete one approved Tier III course.

Required General Health Courses (54 hours)

HEFN 128 Introduction to Nutrition	4
HLTH 101 Introduction to Health and Human Services	2
HLTH 202 Personal and Community Health	4
HLTH 204 Drugs, Alcohol and Tobacco	3
HLTH 227 First Aid	3
HLTH 228 CPR	1
HLTH 360 Environmental Health and Safety	5
HLTH 370 Community Health Problems	4
MICRO 418 Epidemiology (HLTH 350 or HLTH 490 Independent Study in Epidemiology will substitute for MICRO 418)	5
SOC 231 Sociology of Health and Health Care	4
SOC 351 Elementary Research Techniques	4
ZOOL 101 Principles of Biology	5
ZOOL 301 Anatomy	6
ZOOL 345 Physiology	4

Required Courses for the Long Term Care Nursing Home Administration Option (82 hours)

ACCT 201 Financial Accounting	4
EDGS 410 Human Relations	3
HECF 380* Death and Dying	4
HEFN 491 Nutrition for the Elderly	1
HLTH 301 Introduction to Health Care Organizations	4
HLTH 302 Managing Long Term Care I	3
HLTH 303 Managing Long Term Care II	3
HLTH 402 Contemporary Problems in Health Care Organizations	4
HLTH 403 Managing Long Term Care III	3
HLTH 413* Health Aspects of Aging	4
HLTH 480* Nursing Home Practicum I	15
HLTH 481 Nursing Home Practicum II	10
MGT 200 Introduction to Management	4
MGT 450 Managing Health Care Organizations	4
PSY 374* Psychology of Adulthood and Aging	4
SOC 334* Sociology of Aging	4
SW 381* Counseling Older Adults	4
SW 395* Aging in the Welfare State	4

*Upon completion of these courses, the student will qualify for an Ohio University Gerontology Certificate.

Electives

Students will satisfy the remaining hours required for graduation by taking elective courses or attending relevant workshops sponsored or approved by the program. The workshop series (HLTH 491) provides students with special topics not normally contained in the curriculum.

Environmental Health Science

(Major code #6260)

The Environmental Health Science Program prepares the student for a career in one of the many fields of public health. It also fulfills the educational requirements for registration as a sanitarian and for admission to a graduate school of public health. The bachelor of science in health will be awarded to students completing the prescribed course of study.

University General Education Requirements (44-45 hrs)

Tier I: Quantitative Skills	4-5
(MATH 113, 117, 118, 120, 121, 151, or CS 201, ET 180, PHIL 120, PSY 121)	
English Composition	5
(ENG 151, 152, or 153)	
Junior English: (ENG 305J, ENG 308J, HLTH 370J, MGT 325J, JOUR 441J)	5

Tier II : Complete 30 hrs. from an approved list of courses in four of the following areas:	
Fine Arts and Humanities	
Natural Science and Mathematics	
Applied Science and Technology	
Social Science	
Third World Cultures	

Tier III: Complete one approved Tier III course.

Foundations of Health

HLTH 202 Personal & Community Health	4
HLTH 227 First Aid	3
HLTH 360 Envir. Health & Safety	5
HLTH 370 Community Health Prob.	4
HLTH 380 Safety Educ.	4
MICR 211, 212 Envir. Micro.	5

Professional Requirements

CHEM 121 Prin. of Chem.	4
CHEM 122 Prin. of Chem.	4
CHEM 123 Prin. of Chem.	4
ECON 101 Prin. of Econ.	4
ECON 102 Prin. of Econ.	4
GEOG 201 Envir. & Man	4
HECF 360 Human Sexuality	3
HLTH 364 Community Health Field Exper.	2-5
HLTH 464 Community Health Services Pract.	15
HLTH 495 School Health Prob.	5
INCO 104 Listening	2
INCO 205 Techniques in Group Discussion	4
INCO 105 Intro. to Mass Comm.	4
MICR 418 Epidemiology	4
SOC 223 Am. Society	4
SOC 350 Social Stat.	4
SOC 351 Elem. Research Techniques	4
ZOOL 150 Intro. to Zool.	6
ZOOL 151 Intro. to Zool.	6
ZOOL 437 Medical Entomology	6
ZOOL 441 Parasitology	6

Physical Education

(Major code #8106)

A major in physical education prepares men and women to teach physical education at the elementary and secondary school levels. Students may pursue a minor rather than a major in physical education.

Required General Education Courses

All students in physical education must complete 45-50 hours of general education courses in order to be eligible for graduation.

1. Science	
BOT 101 or ZOOL 101	5
ZOOL 301	6
ZOOL 345	4

2. Mathematics	
Any course in the Mathematics Department except 011, 032, 109A, 109B, 320, and 420 is acceptable for the mathematics requirement. Also PSY 121 counts toward the mathematics requirement.	

3. Comparative Arts and/or Philosophy	
Each student is required to complete at least two courses in this area. The two courses need not be in one field. Possibilities include any courses in the Philosophy Department; Comparative Arts Department; HUM 107, 108, 109, 307, 308, and 309; theater history courses; Art History Department; Art Department except for ART 360, 460, 461, 462; School of Music courses except for music education courses, music therapy courses, and the one- or two-hour participation courses.	

4. Social Studies	
Each student is required to complete at least two courses in social science. The two courses need not be in the same field. PSY 101, which is required, is included as one of the social science courses. Other possibilities include any course in anthropology, economics, economic education, history, political science, sociology, social work, geography, and psychology, EXCEPT PSY 275, 121, 226, 312, and 314.	

5. English and Interpersonal Communication	
Each student is required to meet the University minimum English requirement as stated under General Education Requirement in the <i>Graduation Requirements</i> section of this bulletin. INCO 103 is a specific requirement in this area.	

Physical Education

Kindergarten through 12th grade certification with special emphasis in teaching physical education at the elementary and secondary levels.

Required Professional Education Courses*

EDCI 275 Learn Proc. in Classroom	5
OR	
PSY 275 Educ. Psych.	4
EDCI 401 Urban Field Exper.	2
EDCI 480 School & Society (before or after student teaching)	3
EDM 480 Intro to Educ. Media	2
EDPL 461, 462, 465 Student Tchng.	16
EDSE 250 Analys. of Tchng.	4
EDSE 270, 270L Study of Learning	4
EDSE 420 & 420L Tchng. of Reading	5
HPES 234, 334, 434 Field Exper.	4
HPES 402 Tchng. Strategies	3

Physical Education (Elementary-Secondary with K-12 certification)

HLTH 227 First Aid	3
HLTH 495 School Health Problems	5
HPES 105 Cond. for Activ. & Organic Effic.	2
HPES 106 Intro. to Human Movement	2
HPES 115 Rhythmic Activities	2
HPES 134 Intro. to Field Exper.	2
HPES 222 Tumbling & Mod. Gymnastics	2
HPES 223 Track & Field	2
HPES 225 Gymnastics for Men & Women	2
HPES 273 Movement Educ. & Fund. Skills	3
HPES 274 Sport & Game Skills for Elem. Sch. Children	3
HPES 275 Elem. School Rhythm & Dance	3
HPES 302 Kinesiology	4
HPES 333 Theory of Adapted Phys. Ed.	3
HPES 404 History & Prin. of Phys. Ed.	4
HPES 405 Motor Learning	4
HPES 406 Org. & Admin.	4
HPES 409 Tests & Measurements	4
HPES 485 Percept. Motor Devel. in Children	3

ZOOL 301 Human Anat.	6
ZOOL 345 Human Physiology	4
1. TEAM SPORTS (Select 4 hours)	
HPES 260A Flag Football	1
HPES 260B Team Handball	1
HPES 262A Field Hockey	1
HPES 262B Soccer	1
HPES 263A Basketball	1
HPES 263B Volleyball	1
HPES 264A Softball	1
HPES 264B Lacrosse	1
2. INDIVIDUAL SPORTS: (Select 2 hours)	
HPES 141A Archery	1
HPES 141B Golf	1
HPES 221A Tennis	1
HPES 221B Badminton	1
HPES 224B Wrestling	1
HPES 224A Racquetball	1
3. AQUATICS: (Select 2 hours)	
HPES 104 Swimming II	2
HPES 218 Life Saving	2
HPES 220 Water Safety Instructors	3
4. DANCE: (Select 2 hours)	
HPES 107 Modern Dance I	2
HPES 116 Social Forms of Dance	2
HPES 117 Folk & Square Dancing	2
Theory and Practice Courses	
HPES 377 Theory & Pract. of Elem. Phys. Ed.	3
HPES 372 Theory & Pract. of Team and Individual Sports	3

Sport Sciences

(Major code #8114)

The sport sciences include three areas of specialization: coaching, exercise physiology, and athletic administration. These programs are designed for students who do not plan to meet teacher certification requirements.

University General Education Requirements (44-45 hrs)

Tier I: Quantitative Skills	4-5
(MATH 113, 117, 118, 120, 121, 151, or CS 201, ET 180, PHIL 120, PSY 121)	
English composition	5
(ENG 151, 152, or 153)	
Junior English: (ENG 305J, ENG 308J, HLTH 370J, MGT 325J, JOUR 441J)	5
Tier II: Complete 30 hours from an approved list of courses in four of the following areas:	
Fine arts and humanities	
Natural science and mathematics	
Applied science and technology	
Social science	
Third World cultures	
Tier III: Complete one approved Tier III course.	

Core Courses

ANTH 101 Intro. to Cultural Anth.	5
HLTH 204 Drugs, Alcohol, & Tobacco	3
HLTH 227 First Aid	3
HLTH 380 Safety Educ.	4
HPES 105 Conditioning & Organic Efficiency	2
HPES 106 Intro. to Human Movement	2
HPES 261 Practi. in Physical Educ.	1
HPES 273 or 274 or 270 Elem. Classes	3
HPES 404 Hist. & Prin.	4
HPES 406 Organization and Administration	4
HPES Skills Classes	10-14
INCO 103 Intro. to Pub. Spkg.	4
PSY 101 Intro. to Psych.	5
PSY 121 Elem. Stat. for Behavioral Sciences	5

PSY 327 Human Psych.	4
ZOOL 103 Human Biol.	4
63-69 Hrs.	

Areas of Specialization

Students must meet with an advisor before enrolling in classes.

1. Coaching specialization (min. 24 quarter hrs.)

Required	
HLTH 227 First Aid	3
HLTH 228 CPR	1
HPES 212 Intro. to Coaching	3
(prereq. to other courses)	
HPES 215 Practi. in Athletics	2
HPES 319 Research in Coaching	3
HPES 325 Human Dynamics in Coaching	3
HPES 412 Admin. of Sports	3
HSAT 329 Intro. to Athletic Training	2
2 coaching classes (chosen from below)	5-6
HPES 305 Swimming	2
HPES 318 Tennis	3
HPES 320 Wrestling	3
HPES 324 Soccer	3
HPES 351 Golf	2
HPES 352 Ice Hockey	3
HPES 353 Lacrosse	3
HPES 354 Volleyball	3
HPES 356 Field Hockey	3
HPES 365 Basketball	3
HPES 366 Baseball/Softball	3
HPES 367 Football	3
HPES 368 Track	3

2. Exercise Physiology

CHEM 121, 122, 123, or 141, 142, 143	15
HEXP 414 Physiology of Exercise	4
HEXP 415 Physiology of Exercise Lab	2
HPES 302 Kinesiology	4
MATH 163A or 163B or 113	4-3-5
PHYS 201, 202	10
ZOOL 101 Prin. of Biol.	5
OR	
ZOOL 150, 151	12
ZOOL 301 Human Anat.	6
ZOOL 345 Human Physiology	4
ZOOL 346 Human Physiology Lab	3
56-63 Hrs.	

3. Athletic Administration

ACCT 201 Financial Acct.	4
CS 120 Intro. to Comput.	5
HPES 325 Human Dynamics of Coaching	3
HPES 412 Admin. of Sports	3
HSAT 329 Intro. to Athletic Training	2
MGT 325 Comm. Behavior in the Mod. Organization	4
PSY 310 Motivation	4
(4 courses from the following group)	
AAS 402 The Black Child	5
INCO 205 Group Discussion	4
INCO 206 Comm. in Interpersonal Relations	4
INCO 212 Message Preparation	4
SOC 211 Crowd & Mass Behavior	4
SOC 233 Sociology of Sport	4
SOC 363 Juvenile Delinquency	4
SOC 370 Sex Roles & Inequality	4
41-42 Hrs.	

Recreation Studies

Major and minor curricula are offered for prospective recreation specialists. Upon successful completion of the requirements students who major in recreation may apply for the bachelor of science degree. A degree in recreation

will not lead to a teaching certificate in the State of Ohio.

The coursework is designed to prepare students in the basic recreation core and allow them to concentrate in recreation therapy, recreation management, outdoor education and camping, wilderness skills, or special interests.

The major curriculum prepares both men and women to assume positions in city recreation and park departments, state and federal government agencies, youth service agencies, institutional recreation, industrial agencies, religious organizations, camping, commercial recreation, and administration.

The minor in recreation studies is designed to fit the needs of part-time employees in the field of recreation. The curricula will prepare the students for supervision in schools and community recreation programs, summer playgrounds, and camping activities.

University General Education Requirements (44-45 hrs.)

Tier I: Quantitative skills	4-5 hrs.
(MATH 113, 117, 118, 120, 121, 151, or CS 201, ET 180, PHIL 120, PSY 121)	
English Composition	5 hrs.
(ENG 151, 152, or 153)	
Junior English (ENG 305J, ENG 308J, HLTH 370J, MGT 325J, JOUR 441J)	5 hrs.

Tier II: Complete 30 hours from an approved list of courses in four of the following areas:	
Fine Arts and Humanities	
Natural Science and Mathematics	
Applied Science and Technology	
Social Science	
Third World Cultures	

Tier III: Complete one approved Tier III course.

Health and Sport Sciences

(Select 20 hrs.)

HPES 115 Rhythmic	2
HPES 218 Life Saving & Water Safety	2
HPES 220 Swimming, Lifesaving, WSI	3
HLTH 202 Personal & Community Health	4
HLTH 227* First Aid	3
HLTH 327 Instructor's First Aid	3
HREC 290* The Art of Sports Officiating	3
HLTH 380* Safety Educ.	4
HREC 381* Admin. of Intramurals	4
HLTH 204 Drugs, Alcohol & Tobacco	3
HPES 339 Football Officiating	3
HPES 340 Basketball Officiating	3
HPES 341 Baseball Officiating	3

Major Content Area (81 hrs.)

1. Professional Recreation Core (select 50 hrs.)

HREC 199 Intro. to Therapeutic Recreation Services	2
HREC 200* Intro. to Leisure	2
HREC 236 Field Exper. in Rec.	1-3
HREC 250 Rec. Leadership	3
HREC 251 Crafts for Rec. Programs	3
HREC 310* Program Planning & Facilities for Rec.	5
HREC 314 Camping	4
HREC 315 Outdoor Rec. & Educ.	4
HREC 336 Field Exper. in Rec.	3
HREC 345 Camp Leadership	2
HREC 403 Hist. of Rec.	3
HREC 440* Internship	16
HREC 449* Admin. of Rec.	4

2. Professional Education Course (required)

EDM 480 Intro. to Educational Media	4
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3. Recreation Tool Courses: (select 18 hrs.)

HREC 240* Taxidermy	2
HREC 241** Taxidermy II	2
IT 109 Crafts	2

ART (photo) 191 Basic Photog.	4
ART 360 Elem. Tchng.	6
THAR 240 Intro. to Children's Drama	2
THAR 301 Play Produc.	4
THAR 340 Dramatic Lit. for Children	3
THAR 441 Creative Dramatics	3
MUS 120 Intro. to Music Lit.	2
MUS 160 Music Fundamentals	3
MUS 161 Music for the Classroom	3
ART 101 2-Dimensional Design	4
ART 102 3-Dimensional Design	4
ART 105 Intro. to Painting	4
ART 115 Intro. to Ceramics	4
ART 128 Basic Drawing	4
ART 131 Intro. to Sculpture	4
ART 141 Intro. to Printmaking	4
ART 151 Intro. to Graphic Design	4
IT 391 Elem. Ind. Arts	2
HPES 270 Tchng. of Physical Educ.	3
HPES 274 Sports & Game Skills for Elem. School Children	3

*Denotes required course

**Outdoor education students must select either HREC 240 or 241.

4. Physical Education Activities: (Select 9 Courses, 1 Hour each)

Primary Areas of Concentration:

(select 35 hrs. from areas A, B, C, D, or E)

A. Therapeutic Recreation (Major code #8104). This option focuses upon planning, conducting, and administering recreation programs serving the ill, disabled, aging, and disadvantaged in institutional and community settings. Students may qualify for positions serving disabilities in the area of emotional illness, mental retardation, physically handicapped, and aging. Career opportunities are also increasing rapidly in penal and correctional settings and community programs serving the culturally/socially disadvantaged.

ZOOL 301 Human Anat.	6
HPES 302 Kinesiology	4
PSY 231 Psych. of Adjustment (PSY 101)	4
PSY 332 Abnormal Psych. (9 hrs. in psych.)	4
PSY 376 Psych. Disorders of Childhood	4
EDSP 271 Intro. to Educ. of the Except. Child	3
EDSP 378 Sheltered Workshop Organization	2
HREC 376* Prin. & Prac. of Therapeutic Rec.	3
HREC 470 Program Planning for Handicapped & Confined	3
HREC 460 Understanding Play	3
HPES 485 Perceptual Motor Develop. of Children	3
EDEL 200 Studies of Children	4
HECF 160 Intro. to Child Develop.	4
SOC 361 Deviant Behavior	4
SOC 363 Juvenile Delinquency	4
EDSP 400 Intro. to Emotionally Disturbed	3
EDSP 477 Prob. of Adjustment for Handicapped	3
HPES 333 Adaptive Physical Educ.	3
HREC 433 Physical Educ. for the Mentally Retarded	3
HSS 378 Sign Language	3
MUS 181 Intro. to Music Therapy	2
HREC 379 Activities for the Handicapped	3
HREC 214 Camping for the Handicapped	3
HLTH 413 Health Aspects of Aging	3
SOC 334 Soc. of Aging	4
EDSP 470 Classroom Mgt. with Special Children	3

B. Outdoor Education, Interpretive Services, and Camping (Major code #8108). This option focuses upon planning and administering outdoor recreation programs, with special emphasis available for school-oriented programs and resident camping. Students may qualify for positions as interpretive naturalists, outdoor education resource persons, camp directors, visitor information center directors, or supervisors of outdoor recreation programs in federal, state, and local agencies.

GEOG 235 Geog. of Resource Mgt. (Conservation)	3
GEOG 201 Envir. & Man.	4
OR	
GEOL 201 Man & Physical Envir.	4
GEOG 101 Elements of Physical Geog.	5
GEOL 101 Earth Structure	5
GEOL 102 Surface Proc. & Envir.	4
GEOL 291A Earth Materials	2
GEOL 291B Glaciers & Glaciation	2
GEOL 291D Volcanoes & Earthquakes	2
GEOL 291E Mineral Resources	2
GEOL 291F Fossils & Evolution	2
GEOL 291G Soils & Weathering	2
GEOL 291I Water & Pollution	2
GEOL 310 Rocks & Minerals	5
HREC 101 Orienteering	1
HREC 102 Adv. Orienteering	1
HREC 103 Survival I	1
HREC 104 Survival II	1
BOT 311 Biol. & Human Affairs	3
BOT 102 Plant Biol.	5
BOT 247 Vegetation in North America	3
BOT 180* Woody Plants	4
BOT 185 Spring Flora	4
BOT 425 Plant Autecology (or ZOOL 475)	5
BOT 426 Plant Synecology	5
ZOOL 203 Prin. of Zool.	6
ZOOL 269D Biol. of Natural Waters	3
ZOOL 271* Ornithology (field)	2
ZOOL 435 Entomology	6
ZOOL 475 Animal Ecol. (or BOT 425)	3
ZOOL 476 Animal Ecol. Lab.	2
ASTR 100 Survey of Astronomy	3
ASTR 320 Elements of Navigation	2
EDCI 275 Learn. Proc. in Classroom	5
EDEL 340 Tchng. Science	4

C. Recreational Management (Major code #8109). This option focuses upon the administration of recreation programs and will qualify students for positions with public recreation, voluntary agencies, resident institutions, and camp administration.

ACCT 201 Financial (nonmajors)	4
BUSL 255 Law & Society	4
BUSL 465 Law of Sports	4
CS 120* Comput. Science Survey	3
CS 220 Intro. to Computing	5
ECON 101 Prin. of Econ.	4
ECON 318 Econ. of Sports	4
FIN 325 Managerial Finance	4
HREC 311 Expedition Mgt.	3
HRM 420 Admin. of Personnel	4
HRM 425 Labor Relations	4
HRM 460 Manpower Mgt.	4
JOUR 105 Intro. to Mass Comm. (or INCO 105 or TCOM 105)	4
JOUR 221 Graphics of Comm.	5
JOUR 231 News Wrtnng. & Rptng. (preregister in dept.)	4
JOUR 250 Advert. Prin.	5
JOUR 471 Pub. Relations Prin.	5
MGT 200 Intro. to Mgt.	4
MGT 325 Comm. Behavior in Mod. Organization	4
MGT 428 Nonindustrial Labor Relations	4
MGT 440 Organization Behavior-Leadership & Motivation	4
MGT 450 Managing Health Care Organ.	4
MKT 301 Mkt. Prin.	4

Those interested in camp administration should select one of the following courses:

HEFN 120 Meal Mgt.	3
HEFN 128 Intro. to Nutrition	4
HEFN 222 Food Science & Prin.	4

D. Special Interests (Major code #8110). This option focuses upon individualized programs designed to meet unique career goals and will qualify students for extremely specialized positions in recreation and recreation-related fields.

The Special Interests Concentration consists of the student selecting, in consultation with an assigned advisor from the recreation studies faculty, a 35-hour course of study directed toward his or her particular goals.

The student's course of study in the special interests concentration must be approved by the recreation studies program faculty and the coordinator for recreation studies. A copy of the student's program will be filed in the office of the coordinator for recreation studies.

This option (concentration) will not be available to any student who can meet his or her career goals through one of the existing courses of study or to any student who is not a declared recreation major.

E. Wilderness Skills (Major code #8113). This option focuses upon planning, conducting, and administering high adventure and wilderness skills programs. Students may qualify for positions with various wilderness and survival schools, outdoor leadership programs, expedition outfitters, and commercial enterprises in high adventure activities. Career opportunities are also increasing rapidly in programs involving juvenile offenders in both public and private agencies.

BOT 248 Trees & Shrubs	4
GEOL 210 Man & Physical Environ.	4
GEOL 291L Water & Pollution	2
GEOL 330 Prin. of Geomorphology	5
GEOL 407 Topographic Map & Aerial Photo Interp.	4
HREC 101* Orienteering	1
HREC 101M Skiing I	1
HREC 102* Advanced Orienteering	1
HREC 103 Intern. Snow Skiing	1
HREC 105 Whitewater Rafting	1
HREC 106 Hunting	1
HREC 107 Trap Shooting	1
HREC 108 Rapelling	1
HREC 111 Cross-country Skiing	1
HREC 112 Backpacking	1
HREC 113 Canoeing	1
HREC 114 Kayaking	1
HREC 115 Ropes	1
HREC 116 Rescue Techniques	1
HREC 117 Primitive Construction	1
HREC 291 Outdoor Pursuits	3
HREC 311* Expedition Mgt.	3
HREC 390* Wilderness Survival	3
HREC 475* Adventure Programming	3
SW 101 Intro. to Social Welfare & Social Work	3
SOC 201 Contemp. Social Prob.	4
SOC 210 Intro. to Social Psych.	4
SOC 361 Deviant Behavior	4
SOC 363 Juvenile Delinquency	4
SOC 364 Penology	4

Athletic Training Professional Program

This program is available to students majoring in health education, physical education, and community health services. Selected admission is gained through the Athletic Training Department. Any student participating in this program must complete 2,400 hours of clinical experience during the four-year program. Successful completion of the program leads to NATA certification.

Some of the courses are open to students not enrolled in the Athletic Training Professional Program. See instructor for permission to enroll.

Required Courses

ZOOL 301 Human Anat.	6
ZOOL 345 Human Physiol.	4
HLTH 202 Pers. & Comm. Health	4
HLTH 227 First Aid	3
HLTH 228 CPR	1
HPES 302 Kinesiology	4
HSAT 331 Therapeutic Modalities	2
HPES 333 Adapted Phys. Educ.	3
HLTH 327 Instructor's First Aid	2
HLTH 328 Instructor's CPR	3
HSAT 329 Intro. to Athl. Training	2
HLTH 380 Safety Educ.	4
HPES 409 Tests & Measurements	4
HEXP 414 Physiol. of Exercise	4
HEXP 415 Physiol. of Exercise Lab.	2
HSAT 420A Adv. Athl. Training	3
HSAT 420B Adv. Athl. Training	3
HSAT 421 Athl. Training Practi.	2
CHEM 121 Prin. of Chem.	4
MICR 211 Environ. Microbiol.	3
MICR 212 Environ. Microbiol.	2
PSY 101 Intro. to Psych.	5
PSY 275 Educ. Psych.	5
HEFN 128 Intro. to Nutrition	4

SCHOOL OF HEARING
AND SPEECH SCIENCESWilliam H. Seaton, *Director*

The school grants B.S., M.A., and Ph.D. degrees in hearing and speech sciences. The bachelor's degree is considered to be pre-professional. Students entering the program must be eligible to go on to graduate school to obtain clinical certification or complete coursework and student teaching for certification as a speech therapist in the schools. Students who plan on seeking education certification in the future should take courses indicated throughout the program. Curriculum changes currently being developed will give qualified undergraduate students the option to continue on to the master's degree program in hearing and speech sciences.

Practicum training occurs in the campus Speech and Hearing Clinic, regional speech clinics, public schools, mental retardation centers, and other clinical or educational settings. Consultation concerning all types of communicative disorders may be arranged with the coordinator of clinical services. Remedial training and diagnostic evaluations are provided without charge to University students. The audiological division evaluates all types of hearing problems from infancy to old age, including hearing aid evaluations. Nominal fees are charged for speech and hearing services to nonstudents. Research in therapy, acoustics, and other areas of communication is completed in well-equipped laboratories with four sound-proof rooms.

The programs in speech pathology and audiology are accredited by the American Board of Examiners in Speech Pathology and Audiology's Education and Training Board. The Ohio University Speech and Hearing Clinic is accredited by the Professional Services Board of ABESPA.

Information about major programs and requirements can be obtained from the school office in Lindley Hall.

MAJOR IN HEARING AND
SPEECH SCIENCES

(Major code #5305)

Freshman

Freshmen are required to take the Tier I and Tier II requirements of the University. PSY 101, LING 270, and HSS 108, all of which may be used under the Tier II requirement, are to be taken by freshmen; in addition, HSS 107 is required.

Majors are assigned advisors and are expected to see their advisors during each preregistration period. The program is complex and highly interrelated. HSS majors who may wish to obtain education certification in the future should apply during the third quarter of the freshman year to the College of Education for admission to teacher education (See *College of Education* section of this bulletin).

Sophomore

During the sophomore year students must pass a speech proficiency test administered in HSS 240 and pass the departmental phonetics proficiency test during either winter or spring quarter. Courses with asterisks (*) may be taken by all majors but are required only for those students who may wish to seek certification in the public schools in the future.

Fall

HSS 209 Phonetics	4
HSS 210 Language Devel.	5
PSY 275 Educ. Psych.	4
OR	
EDC1 275* Learning Pro.	5

Winter

HSS 213 Anat.	4
HSS 250 Speech Science	4
EDSP 270* Classroom Management I	3

Spring

HSS 270 Basic Audiology	4
HSS 319 Voice & Resonance	3
PSY 376 Exceptional Children	5
OR	
EDSP 271 Intro. Educ. Except. Children	3

Students will also enroll for HSS 240 for one quarter sometime during the year. Majors who will be seeking certification as public school therapists should apply in the third quarter of the sophomore year to the College of Education for advanced standing in professional education (see *College of Education* section of this bulletin).

Junior

Majors cannot enter junior practicum class without having successfully passed the departmental speech and phonetics proficiency tests. Courses with asterisks (*) are required only for students who may be seeking educational certification in the future.

Fall

HSS 315 Stuttering	3
HSS 318 Articulation Disorders	5

Winter

HSS 344 Disorders of Language	4
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Spring

HSS 322 Diagnostics	4
HSS 345 Social Dialects	3

The following courses are also required and should be taken either in the junior or senior year. In addition, all majors enroll for HSS 341 Practicum for one quarter during the junior year.

EDEL 311* Teaching of Reading	4
EDEL 311L* Lab	1
EDGS 410* Human Relations	3
EDSP 474* Intro. to Learning Disabilities	4
EDCI 401* Urban Exper.	2
EDEL 200 & 200L or PSY 273 or HEC 160	4-5
PSY 332 or PSY 333 or EDSP 272	3-5
PSY 310 or LING 350 or PSY 307 or EDEL 400	3-5
Advanced English Composition: ENG 305 or 308	5

Senior

Students may not enter senior practicum HSS 442 if they have not obtained a grade of C or better in both HSS 318 and HSS 344. Students who will be seeking education certification at some time in the future must take senior practicum. A request for waiver of senior practicum may be made by a student.

In addition to major courses, senior students are encouraged to take electives to broaden their base of general knowledge in order to achieve the 192 hours for graduation. Curriculum changes currently being developed may give seniors who are qualified options for more practicum training and academic coursework.

HSS 471 Auditory Rehabilitation	5
HSS 479 Basic Manual Comm.	3
HSS 424 Neuropathology	4
HSS 442 Senior Pract.	3
Electives	
HSS 442C Clinical Internship (permission only)	1-15
Tier III course	3-5

SCHOOL OF HOME ECONOMICS

Shirley Slater, *Director*

The School of Home Economics is committed to the search for, and the application of, concepts and competencies which enable the individual to meet basic needs and to improve the quality of life within the context of his or her natural and interpersonal environment. The educational program focuses on the problems of human welfare that are of compelling significance in contemporary society: nutrition and health, design and environmental analysis, consumer decision making, emotional stability, and the effects of technology and economic policy on such things as food, clothing, housing, and interpersonal relationships.

The curricula of the School of Home Economics have four specific purposes.

1. To offer programs which provide specialized preparation for professionals in: family studies and community services, human nutrition and food sciences, and human environment and design.
2. To offer courses for the University community which enable the individual to meet basic needs and to improve the quality of life.
3. To offer continuing education and community service in response to basic and social needs.
4. To promote and support research and discovery.

The program is both cultural and professional. It includes general education in communication, natural science, humanities, social science, and art, as well as basic courses in all areas of home economics and professional courses in the major field and related areas.

The School of Home Economics offers 12 professional curricula leading to the B.S. in home economics degree. In addition, four curricula are offered for those following the two-year terminal program leading to the A.A. degree. Graduate work leading to the M.S. degree is also offered (see graduate catalog).

Elective Courses and Special Programs. The School of Home Economics offers a group of courses that have no prerequisites and are open to any student in the University. Individual courses may be elected. Special seminars or workshops for in-service training are offered each summer and during the year when there is a need.

Special Facilities. The program in home economics provides for a variety of activities and experiences. One child development center and one home management center are maintained on campus. Local high school home economics laboratories are available for student teaching. The School of Home Economics is approved by the State of Ohio Department of Education for preparing vocational home economics teachers. Off-campus activities have been developed with the Ohio State Cooperative Extension Service, the Health Department, business organizations, department stores, community agencies, hospital dietary departments, and radio and television stations to give the students opportunities for field work in specialized areas.

Child Development Center. The Ohio University Child Development Center provides clinical opportunities for Ohio University students from the schools of Home Economics, Hearing and Speech Sciences, Health and Sport Sciences, the Department of Psychology, and the College of Education, as well as from other related disciplines throughout the University.

The philosophy of the Child Development Center is based on the belief that learning results from the dynamic interaction between children's emerging cognitive and affective systems and their environment. The primary commitment of the Child Development Center is to help children realize their fullest potential in their emotional, social, cognitive, and physical development.

A second responsibility of the Child Development Center is to play an active, coordinated role in preparing preschool and early childhood educators. In addition to serving as a training and observation site for Ohio University students, the center is committed to research that furthers knowledge of the growth and development of children, of family relations, and of educational curricula.

Finally, the center acts as an extension of and support to families in the Athens community, offering both developmental child care and professional knowledge of children's growth, development, and learning.

DEGREE REQUIREMENTS FOR ALL HOME ECONOMICS MAJORS

Candidates for the degree of B.S. in home economics must fulfill the University General Education requirements and must complete a minimum of 192 hours. Only three hours of physical education will be counted toward the 192-hour requirement. A point-hour ratio of 2.0 (C) is required on all hours attempted, but includes only final hours and grade points on repeated courses.

Opportunities for the professional home economist have never been greater in the business and professional world. Career opportunities are listed under each professional option.

REQUIREMENTS FOR PROFESSIONAL CURRICULA

Family Studies and Community Services

PROGRAM STANDARDS:

To remain active in any program option listed for Family Studies and Community Services, a student must meet the following criteria:

1. Maintain an overall GPA of 2.0 (C) or better in all hours attempted at Ohio University.
2. Maintain a GPA of 2.3 (C+) or better in all courses listed under Home Economics Basic and Specialized Requirements in the student's selected program option.
3. No grade below a 2.0 (C) is acceptable towards completion of the courses identified by an asterisk (*) in the student's program option.

Child and Family

Option A — Early Childhood Education (Major code #6350): prepares students for teaching in nursery schools, daycare centers, Head Start programs, and schools for handicapped children.

Home Economics Basic Requirements

HEG 101* Prof. Awareness	2
HEID 180 Furnishing Today's Home	3
HEFN 232 Infant & Child Nutrition	4
OR	
HEFN 128 Intro. to Nutrition	4
HECE 390 or 395 Family Consumer Econ. or Mgt.	3

Specialized Requirements

HECF 160* Intro. to Child. Devel.	4
HECF 361 Preschool Guidance	4
HECF 465 Parent Educ.	4
HECF 365 Infant Educ.	4
HECF 363 Creative Exper. with Young Children	4
HECF 364 Premath & Science Exper. with Young Children	4
HECF 299* Soph. Practi. Prof. Assessment	5
HECF 399* Jr. Practi. Prof. Devel.	5
HECF 400* Sr. Seminar	3
HECF 464* Early Childhood Practi.	6-12
HECF 462A Pluralistic Life Styles	2
HECF 462C Middle Childhood	2
HECF 462D Single Parent Family	2
HECF 463 Preschool Admin.	5
HECF 371* Family Devel.	3
HECF 467 Theories of Child Devel.	4
ART 360 Art for Elem. Educ.	6
EDM 480 Intro. to Educ. Media	4
EDCI 275 Learning Proc. in Classroom	5
OR	
PSY 275 Educ. Psych.	4
EDGS 410 Human Relations	3
EDSP 271 Intro. to Educ. of Except. Children & Youth	3
EDSP 272 Intro. to Educ. of Mentally Retarded Children & Youth	3
EDSP 270 Classroom Mgt. with Problem Children I	3
HLTH 227 First Aid	3
HPES 485C Perceptual Motor Devel. in Children	3
HSS 209 Phonetics	4
HSS 210 Lang. Devel.	5
MUS 262 Music for the Preschool Child or Music 160	3
PSY 121 Elem. Stat.	5
PSY 304 Human Learning	5
PSY 332 Abnormal Psych.	5

**Option B — Community Service—Child Development/
Family Life** (Major code #6351): prepares student for
graduate study in child development and/or family life or
for work with community agencies, children's homes,

youth programs, Head Start programs, family service
agencies, children's hospitals, and clinics and settlement
houses.

Home Economics Basic Requirements

HEG 101* Prof. Awareness	2
HEID 180 Furnishing Today's Home	3
HEFN 128 Intro. to Nutrition	3
HECE 395 Home Mgt.	3
HECE 390 Family Consumer Econ.	3

Specialized Requirements

HECF 160* Intro. to Child Devel.	4
HECF 370 Family Living	3
HECF 361 Preschool Guidance	4
HECF 299* Soph. Practi. Prof. Assessment	5
HECF 371* Family Devel.	3
HECF 360 Human Sexuality	3
HECF 399* Jr. Practi. Prof. Devel.	5
HECF 462A Pluralistic Life Styles	5
HECF 462B Parenthood	2
HECF 462C Middle Childhood	2
HECF 462D One-Parent Family	2
HECF 462E Youth Identity Crisis	2
HECF 462F Aging Family	2
HECF 400 Sr. Seminar	3
HECF 499* Field Work	12
HECE 444 Adult Education	4
OR	
HECF 465 Parent Education	4
OR	
HECF 471 Family Life Education	4
EDGS 410 Human Relations	3
HLTH 227 First Aid	4
MGT 200/300 Intro. to Mgt./Mgt.	4
PSY 121 Elem. Stat.	5
PSY 131 Psych. of Adjustment	4
PSY 333 Psych. of Personality	5
SOC 315 Indiv. in Mass Society	4
SOC 361 or 363 Deviant Behavior or Juvenile Delinquency	4
SW 290 Social Security System	4
SW 391 Welfare System	4
SW 392 Social Services	4
Approved electives	16-20

Early Childhood/Special Education: detailed under the
School of Curriculum and Instruction in the *College of
Education* section of this catalog. This is a dual program
and a student can earn either a bachelor of science in
home economics or a bachelor of science in education.

Early Childhood/Elementary Education: detailed under
the School of Curriculum and Instruction in the *College of
Education* section of this catalog. This is a dual program
and a student can earn either a bachelor of science in
home economics or a bachelor of science in education.

Home Economics Education

Option A — Home Economics Education and Extension (Major code #6370): prepares students for teaching
home economics in the junior and senior high schools and
adult education programs. The education program meets
the requirements for vocational home economics certification
in Ohio.

Basic course requirements for all home economics education
majors.

General Requirements

The current State of Ohio requirements for teacher certification
state that a person applying for a teaching certificate must com-

plete 45 hours of general education courses well distributed over the following areas (approximately 10-15 hours in each):

- Science and Mathematics
- Social Science
- English and/or Foreign Language
- Fine Arts, Philosophy and/or Theological Studies

Students *must* meet with their home economics education advisor to make sure general education *and* certification requirements will be met.

Home Economics Basic Requirements

HEG 101* Prof. Awareness	2
HEFN 128* Intro. Nutrition	4
HEID 180* Furnishing Today's Home	3
HECF 371* Family Devel.	3
HECE 395 Home Mgt.	3

Specialized Requirements

HEFN 120* Meal Mgt.	3
HEFN 222* Food Science Prin.	4
HETC 213* Design Analysis: Theory & Prin.	5
HETC 315 Elem. Textiles	4
HETC 117* Textiles & Dress & Envir.	3
HECF 160 Intro. to Child Devel.	4
HECF 361 Preschool Guidance	4
HECE 390 Family Consumer Econ.	3
HECE 396 Home Mgt. Lab	4
HECE 391 Equipment	4
HECE 340 Tchng. Home Econ.	4
HECE 299* Seminar	2-5
HECE 399* Seminar	2-5

Approved Electives from 300- and 400-level courses in:

Human Nutrition and Food Science	3-4
Human Environment and Design	6-8
Family Studies and Community Services	3-4

Professional Education

PSY 275 Educ. Psych.	4
OR	
EDCI 275 Learning Proc. in Classroom	5
EDSE 250 Analys. of Tchng. and EDSE 250L	4+1
EDSE 270 and 270L	3+1
EDSE 351 Instruct. Proc. & Curriculum	5
EDSE 401 and EDSE 420	4
EDPL 463 and 464 Stu. Tchng. and 420L	6+1
EDPL 465 Seminar in Home Econ. Educ.	3
EDSE 480 School & Society	3
EDM 480 Media	2-4

Home Economics Extension: prepares students for positions with the Cooperative Extension Service.

Home economics extension majors take all basic course requirements listed above for home economics education majors.

Suggested Course:

HECE 444 Home Econ. in Adult Educ.	4
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Option B — Job Training - Child Care Services, Food Service, or Community and Home Service: Students may complete requirements for job training certification by taking 45 hours of coursework in a specialized area of home economics. Permission must be granted by the home economics education advisor.

Option C — Home Economics in Business (Major code #6374): a special option which can be combined with other areas of home economics. Students are prepared for positions as home economists with newspapers, magazines, radio and television companies, department stores, and manufacturing companies. (Not currently being offered.)

Human Environment and Design

Textiles and Clothing

Program Standards

To remain active in any program option listed as Fashion Merchandising, a student must meet the following criteria:

1. Maintain an overall g.p.a. of 2.0 (C) or better in all hours attempted at Ohio University.
2. Maintain a g.p.a. of 2.3 (C+) or better in all courses listed under Major Requirements.
3. No grade below a 2.0 (C) is acceptable towards completion of the course(s) identified by an asterisk (*) in the option listing.
4. Achieve a 2.5 g.p.a. in major requirements prior to enrollment in HETC 400 and HETC 499.

Option A — Fashion Merchandising and Promotion (Major code #6380): prepares students for retail managerial and promotional positions such as buyer, fashion coordinator, or consultant in department stores or traveling stylist for pattern or fabric manufacturers; for promotional instruction and demonstration; and for fashion writing.

Home Economics Basic Courses

HEG 101 Prof. Awareness	2
HEID 180 Furnishing Today's Home	3
HECF 371 Family Devel.	3
HECE 390 Consumer Econ.	3
HEFN 325 Foods & Consumer	3
OR	
HEFN 128 Intro. Nutrition	4

Major Requirements

HETC 315 Elem. Textiles	4
HETC 117 Textiles & Dress in Envir.	3
HETC 213 Design Analys.: Theory & Prin.	5
HETC 415 Design Analys.: Flat Pattern	4
HETC 316 Design Analys.: Tailoring	4
OR	
HETC 313 Design Analys.: Experimental	4
HETC 417 Fashion Merchandising: Mgt.	4
HETC 318 Fashion Merchandising Promotion	4
HETC 407 Fashion Industries	4
HETC 405A History of Costumes	4
HETC 405B History of Textiles	2
HETC 418 Quality Control	4
HETC 299 Soph. Practi.-Prof. Assessment	2-5
HETC 399 Jr. Practi.-Prof. Devel.	2-5
HETC 499 Field Work: Merchandising	5-12
HETC 400 Sr. Seminar	1-3

Required Courses

ACCT 201 Financial Acct.	4
CS 220 Computer Science Survey	5
OR	
CS 223 Intro. to Computing	5
OR	
CSB 200 Intro. to Computers	4
JOUR 250 Advert. Prin.	5
MKT 301 Mkt. Prin.	4
MGT 300 Mgt.	4
INCO 103 Pub. Spkng.	4
JOUR 441J, ENG 305J, or MGT 325J	3-5
PSY 101 Gen. Psych.	5
SOC 101 Intro. to Soc.	5
ECON 101, 102 Prin. of Econ.	8
CHEM 121, 122, 123 Chem.	12
OR	
PSC 100B, 101, 105	12
ART 101, 102, 128 Dimensional Design, Basic Drawing	8
Comparative Arts (2 quarters)	8

Approved general education electives	7
Approved business/communication electives	4
Approved upper-level business electives	12

Option — Fashion Merchandising and Textiles Testing: Not currently being offered.

Option — Fashion Merchandising and Design: Not currently being offered.

Interior Design

Option B — Interior Design (Major code #6383): offers basic preparation that qualifies students for initial positions in the field of interior design. A student must maintain a C in studio courses in order to remain in the program.

Home Economics Basic Requirements

HECF 160 Child Development	4
OR	
HECF 371 Family Development	3
HEFN 128 Intro. Nutrition	4
OR	
HEFN 120 Meal Management	3
OR	
HEFN 325 Food & Consumer	3
HECE 395 Home Management	3
OR	
HECE 390 Consumer Econ.	3
HEG 101 Prof. Awareness	2
HETC 315 Elem. Textiles	4

Major Requirements

IT 104, 105	10
HEID 180 Furnishing Today's Home	3
HEID 299 Soph. Practi.-Prof. Assessment	2-5
HEID 280, 281, 282 Interior Design Studio	12
HEID 399 Jr. Practi.-Prof. Devel.	2-5
HEID 350 Architectural & Furnishing Materials	3
HEID 384 Family Housing	3
HEID 388 Lighting Fundamentals	3
HEID 389 Lighting Design & Application	3
HEID 385 Home Furnishings Wrkshp.	4
HEID 499 Field Work Exper.	5-12
HEID 400 Sr. Seminar Prof. Evaluation	1-3
HEID 480 Hist. of Furniture	4
HEID 481 Contemp. Design in Furniture	3
HEID 482 Design in Home Accessories	3
HEID 483, 484, 485 Adv. Interior Design Studio	12

Required Courses

JOUR 250 Advert. Prin.	5
MKT 301 Mkt. Prin.	4
CS 120 or 220 Computer Science	5
INCO 103	3
CA 350, 351, 352, 353, 354	12
ART 101, 103, 128	8
Econ 101, 102	8
Approved business elective	4

Human Nutrition and Food Science

Option A — Dietetics and Community Nutrition (Major code #6360): meets American Dietetic Association academic requirements qualifying students for internship in general and community specializations — Plan IV.

Home Economics Basic Requirements

HEG 101 Prof. Awareness	2
HEID 180 Furnishing Today's Home	3
HECF 371 Family Devel.	3
OR	
HECF 160 Intro. to Child Devel.	4
HECE 390 Family Consumer Econ.	3

Specialized Requirements

HEFN 120 or equiv. Meal Mgt.	3
HEFN 222 Food Science	4
HEFN 128 Intro. to Nutrition	4
HEFN 299 Soph. Pract. Prof. Assessment	2-5
HECE 391 Equipment	4
HEFN 334 Quantity Food Prod.	4
HEFN 399 Jr. Pract.-Prof. Devel.	2-5
HEFN 426 World View of Nutrition	3
HEFN 437 Food Service Systems I	4
HEFN 422 Experimental Foods	4
HEFN 428 Adv. Nutrition	4
HEFN 430 Therapeutic Nutrition	4
HEFN 438 Food Service Systems II	4
HEFN 429 Community Nutrition	3
HEFN 400 Seminar	1
HEFN 499 Field Exper. Foods & Nutrition	5-12
ANTH 101 Intro. to Cultural Anth.	5
ACCT 201 Financial Acct.	4
CHEM 301, 302 Organic Chem.	6
CS 120 Comput. Science Survey	4
EDCI 275 Learning Proc. in Classroom	5
OR	
PSY 275 Educ. Psych.	4
MGT 300 Intro.	4
HRM 420 Admin. of Personnel	4
MICR 211 and 212 or 411 Micro.	6
PSY 121 Elem. Stat. for Behavioral Sciences	4
ZOOL 345 Human Physiology	4
ZOOL 463 Cell Chem.	4
INCO 101 Communication	3
OR	
INCO 103 Public Speaking	4
PSY 101 Gen. Psych.	5
SOC 101 Intro. to Sociology	5
OR	
SOC 302 Princ. of Sociology	5
ECON 101, 102 Princ. of Economics	8
OR	
ECON 301, 302 Intro. to Econ. Analysis	8
CHEM 141, 142, 143, Intro., Chem. Energetics, Quant. Analys.	15
OR	
CHEM 121, 122, 123	12

Option B — Food Service Management (Major code #6361): prepares students for careers in management and supervision in hotels, motels, restaurants, public schools, residence halls, and industry.

Home Economics Basic Requirements

HEG 101 Prof. Awareness	2
HECF 160 Child Development	4
OR	
HECF 371 Family Development	3
HEID 180 Furnishing Today's Home	3
HECE 390 Family Consumer Econ.	3

Specialized Requirements

HEFN 120 Meal Mgt.	3
HEFN 128 Intro. to Nutrition	4
HEFN 222 Food Science Prin.	4
HEFN 299 Soph. Practi. Prof. Assessment	2-5
HEFN 334 Quantity Food Production	4
HEFN 399 Jr. Practi.-Prof. Devel.	2-5
HEFN 400 Sr. Seminar	1
HEFN 422 Experi. Foods	4
HEFN 437 Food Service Systems I	4
HEFN 438 Food Service Systems II	4
HEFN 499 Field Exper. Foods & Nutrition	5-12
HECE 391 Equipment	4
HETC 315 Elem. Textiles	4
ACCT 201, 202 Financial, Managerial	8
BUSL 255 Law & Society	4
CS 120 Computer Science Survey	3
JOUR 250 Advert. Prin.	5
MGT 300 Intro.	4
HRM 420 Admin. of Personnel	4
HRM 425 Industrial Relations	4

MKT 301 Marketing Prin.	4
MICR 211, 212 Environ. Micro./Lab.	5
PSY 275 Educ. Psych.	4
OR	
EDCI 275 Learning Proc. in the Classroom	5
INCO 101 Communication	3
OR	
INCO 103 Public Speaking	4
PSY 101 Gen. Psych.	5
SOC 101 Intro. to Sociology	5
OR	
SOC 302 Princ. of Sociology	5
ECON 101, 102 Princ. of Economics	8
OR	
ECON 301, 302 Intro. to Econ. Analysis	8
CHEM 121, 122, 123 Intro., Solutions, Envir.	12
Elective in business, industrial engineering, finance, management, or marketing	4

Option C — Foods in Business and Communication
(Major code #6362): prepares students for promotional work with utility companies, food or equipment companies, newspapers, and magazines.

Home Economics Basic Requirements

HEG 101 Prof. Awareness	2
HECF 160 Child Development	4
OR	
HECF 371 Family Development	3
HEID 180 Furnishing Today's Home	3
HETC 315 Elem. Textiles	4
HECE 390 Family Consumer Econ.	3

Specialized Requirements

HEFN 120 Meal Mgt.	3
HEFN 128 Intro. to Nutrition	4
HEFN 222 Food Science Prin.	4
HEFN 299 Soph. Practi.-Prof. Assessment	2-5
HEFN 321 Creative Cookery & Food Styling	3
HEFN 325 Food & Consumer	3
HEFN 334 Quantity Food Prod.	4
HEFN 399 Jr. Practi.-Prof. Devel.	2-5
HEFN 400 Sr. Seminar	1
HEFN 422 Experimental Foods	4
HEFN 423 Food Preservation	3
HEFN 426 World View of Nutrition	3
HEFN 499 Field Exper. - Foods & Nutrition	5-12
HECE 391 Equipment	4
HECE 395 Home Mgt.	3
CHEM 301, 302 Organic Chem.	6
MICR 211 and 212 or 411 Environmental Micro.	5-6
JOUR 250 Advert. Prin.	5
MGT 325 Comm. Behavior in Mod. Organization	4
CS 120 Comput. Sci. Survey	4
OR	
PSY 121 Statistics	5
INCO 101 Communication	3
OR	
INCO 103 Public Speaking	4
PSY 101 Gen. Psych.	5
SOC 101 Intro. to Sociology	5
OR	
SOC 302 Princ. of Sociology	5
OR	
ANTH 101 Intro. to Cultural Anth	5
ECON 101, 102 Princ. of Economics	8
OR	
ECON 301, 302 Intro. to Econ. Analysis	8
CHEM 121, 122, 123 Intro., Solutions, Envir.	12
OR	
CHEM 141, 142, 143 Intro., Chem. Energetics, Quant. Analys.	15
Select two of the following:	
JOUR 231 Reporting	4
OR	
JOUR 441J Writing	4
MGT 300 Management	4
OR	
MKT 301 Principles	4

Approved INCO course beyond University General	
Education requirement	3-4
Business/communication elective	4

Option D — Nutrition with Science (Zoology) (Major code #6363): meets American Dietetic Association academic requirements qualifying students for internships with clinical emphasis — Plan IV. It also provides a basis for those students desiring graduate study and research in nutrition and/or zoology. Certain other preprofessional undergraduates, such as those in premedicine, with a strong interest in nutrition, will find the program satisfies requirements for admittance to professional schools. A student can major either in human nutrition and food science in the School of Home Economics, College of Health and Human Services, or in the Department of Zoological and Biomedical Sciences in the College of Arts and Sciences.

Specialized Requirements

INCO 101 Communication	3
OR	
INCO 103 Public Speaking	4
PSY 101 Intro. to Psych.	5
SOC 101 Intro. to Sociology	5
OR	
SOC 302 Princ. of Sociology	5
ECON 101, 102 Prin. of Econ.	4-4
CHEM 141, 142, 143 Intro./Chem Energetics/ Quant. Analys.	15
MATH 163A, 163B Intro. to Calc.	8
PHYS 201, 202, Intro. to Physics	8
CHEM 301, 302 Organic Chem.	6
ZOOL 150, 151 Intro. to Zool.	12
ZOOL 325 Genetics	5
ZOOL 303 Comparative Vertebrate Anat.	6
MICR 211, 212 Envir. Micro.	5
OR	
MICR 411 Gen. Micro.	6
ZOOL 463 Physiological Chem.	4
ZOOL 464 Physiological Chem. Lab.	3
ZOOL 482D Mammalian Physiology	6
HEFN 128 Intro. to Nutrition	4
HEFN 222 Food Science Prin.	4
HECF 160 Intro. to Child Devel.	4
OR	
HECF 371 Intro. to Family Devel.	3
PSY 121 Statistics	5
PSY 275 Ed. Psych.	5
MGT 300 Mgt.	4
HEFN 422 Experimental Foods	4
HEFN 428 Adv. Nutrition	4
HEFN 429 Community Nutrition	3
HEFN 430 Therapeutic Nutrition	4
HEFN 299 Soph. Pract.	3
HEFN 399 Junior Pract.	2-5
HEFN 499 Field Experience	5-12
HEFN 400 Senior Seminar	1
HEFN 431 Res. in Nutrition	3

Additional Suggested Courses

HEFN 120 Meal Mgt.	3
HEFN 423 Food Preservation	4
HEFN 426 World View of Nutrition	3
HEFN 334 Quantity Food Production	4
MICR 417 Adv. Gen. Micro.	6
CS 201 Intro. to Computing	5

Students majoring in home economics must fulfill School of Home Economics degree requirements including 12 hours of approved home economics core courses selected across the four areas.

The course sequence should be adhered to closely and always in consultation with an advisor assigned to the student either in the School of Home Economics or the Department of Zoological and Biomedical Sciences.

Minor in Basic and Applied Nutrition

The objective of this minor is to give students in other health fields the opportunity to strengthen their knowledge of nutrition principles and applications. Students completing this minor are prepared to provide basic information and guidance concerning nutrition and diet and to help others identify reliable nutrition resources in the community. A minimum of 29 to 31 hours are required for the minor plus any necessary prerequisites. Successful completion of this program is indicated on the student's permanent record.

Requirements include:

- A. 26-29 hours in supporting sciences, 12 hours of which may be applied toward the minor. (These courses are all prerequisites to upper level HEFN courses.)
- | | |
|---------------------------------|----|
| CHEM 121, 122, 123 | 12 |
| OR | |
| CHEM 141, 142, 143 | 15 |
| CHEM 301, 302 Organic | 6 |
| ZOOL 345 Human Physiology | 4 |
| ZOOL 463 Cell Chemistry | 4 |
- B. 17-19 hours in nutrition courses
- | | |
|---|-----|
| HEFN 128 Introduction to Nutrition | 4 |
| HEFN 428 Advanced Nutrition | 4 |
| HEFN 430 Therapeutic Nutrition | 4 |
| HEFN 429 Community Nutrition | 4 |
| HEFN 427 Studies in Foods and Nutrition | 2-4 |

SCHOOL OF NURSING

Audrey M. Koertvelyessy, *Acting Director*

BACCALAUREATE PROGRAM

(Major code #1203)

The School of Nursing offers a National League of Nursing accredited baccalaureate program for registered nurses and awards the bachelor of science in nursing degree. The program is designed for students who are licensed graduates of state-approved associate degree or diploma programs. The mission of the program is consonant with the mission and the philosophy of Ohio University. Courses are offered on the regional campuses as well as on the Athens campus, increasing availability for professional development and/or career mobility for registered nurses. The purpose of the program is to prepare generalists for professional practice of nursing and to provide the foundation for graduate study.

The program leads to a major in nursing through a curriculum including required nursing education and University General Education requirements, as well as electives in upper-division general education.

Transcripts of previous education are evaluated by the Ohio University Office of Admissions. The relationship of previous learning to the curriculum basis for the nursing major is established by further evaluation in the School of Nursing.

The student's admission to and progression through the program includes the following steps: (1) *Admission to Ohio University*—after initial review and individual appraisal of student records of previous coursework, admitted students are informed of the program prerequisites they must meet and oriented to the expectations and structure of the program; (2) students may then enroll in courses to complete the program prerequisites; (3) when these prerequisites have been met, students are admitted into the nursing major and may then complete the required nursing courses in sequence.

Many of the nursing courses have a clinical component provided to operationalize theory in practice. The clinical experiences occur in a broad range of traditional and non-traditional health care and health maintenance settings in the communities surrounding the locations at which the courses are being offered. These clinical experiences have been carefully selected to optimize learning. Students are responsible for transportation to the clinical experiences.

A grade of C or better must be earned in each course offered by the School of Nursing (NBSP series). If a grade of C is not earned, then the student must repeat the course. A student must file a Repeated Course Form with the dean's office in order to have the C-or-better grade counted for graduation and point-hour ratio.

At the completion of the program of 192 quarter hours, the student is awarded the bachelor of science in nursing degree.

Program Prerequisites

I. Lower Division Nursing

- A. Transfer credit (36 qtr. hours) is awarded to applicants with an associate degree in nursing from a regionally accredited college or university.
- B. Credit is awarded to applicants with a diploma in nursing after competency is validated (36 qtr. hours maximum) through the ACT Proficiency Examination Program.

II. University General Education Requirements

- A. Tier I Requirement
 1. *Freshman English Composition
English (151, 152, or 153)
 2. *Quantitative Skills
Psychology (121)
- B. Tier II Requirement
 1. Social Sciences
 - *Introduction to Sociology (101)
 - *Introduction to Psychology (101)
 - *Growth and Development (PSY 173, HECF 160, or EDEL 200)
 2. Natural Science and Mathematics
 - *Chemistry I (CHEM 121 or 141)
 - *Anatomy and Physiology (ZOOL 150)
 3. Applied Science and Technology
 - Human Nutrition (HEFN 128)
 - *Microbiology (MICR 211 and 212 or 310)
 4. Fine Arts and Humanities (4 credit hours) or
Third World Culture (4 credit hours)

*College Level Examination Program (CLEP) available for applicants who do not have college or university transfer credit and who wish to establish proficiency for these prerequisites in this manner.

Program Requirements

1. Graduate of state-approved associate degree or diploma program in nursing
2. Admission to Ohio University
3. Evaluation of official transcripts from lower-division nursing program and any other post secondary education
4. Ohio R.N. licensure
5. Professional liability insurance
6. Completion of program prerequisites
7. Attendance at orientation to the nursing program before beginning nursing major sequence.

Curriculum

Required Nursing Education (54 qtr. hours)

Junior Sequence

NBSP 300 Concepts of Nursing I	5
NBSP 310 Concepts of Nursing II	5
NBSP 320 Concepts of Nursing III	5
NBSP 330 Concepts of Nursing IV	5
NBSP 340 Concepts of Nursing V	5
NBSP 360 Concepts of Nursing VI	3

Senior Sequence

NBSP 400 Concepts of Nursing VII	5
NBSP 420 Concepts of Nursing IX	5
NBSP 430 Concepts of Nursing X	5
NBSP 440 Concepts of Nursing XI	5
NBSP 460 Concepts of Nursing XII	3

Elective in Nursing (select one)

NBSP 465 Concepts of Nursing XIII	3
NBSP 475 Concepts of Nursing XIV	3
NBSP 485 Concepts of Nursing XV	3
NBSP 495 Concepts of Nursing XVI	3
NBSP 490 Concepts of Nursing XVII	1-3

Required General Education Courses (48 qtr. hours)

Students are expected to select, with advisement, from among the 300- and 400-level courses in the following areas:

Behavioral Sciences

- Psychology (select one)
- Sociology (select one)
- Human Relations (select one)

Biological Sciences (select two)

Humanities (select one)

Junior Level Advanced Writing (select one course with the J designation)

Electives

Students may select from 300- and 400-level courses in any area. Also, students may select 1-5 credit hours of workshop studies to fulfill general elective credit hour requirements.

Nursing Workshops

NBSP 491 (A, B, C, D, E) Concepts of Nursing XVIII	1-3
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schools, extended care facilities, private practice, and developmental disabilities centers). While the emphasis will be on rural community practice, graduates of the program will possess the necessary skills for practice in larger, metropolitan centers.

The curriculum includes major components related to basic and clinical sciences, physical therapy arts and sciences, health services administration, research, and education with the intent of preparing graduates who are competent physical therapy practitioners and health care professionals. The curriculum reflects a systems-oriented, problem-solving design and includes didactic, laboratory, and clinical components.

ADMISSION AND SELECTION PROCEDURES

Admission Procedures:

Ohio University Students

Prospective physical therapy students who are currently attending Ohio University are to:

1. Obtain a Program Admission Form from the School of Physical Therapy.
2. Complete and return the Program Admission Form to the School of Physical Therapy.
3. Submit an official Ohio University transcript to the School of Physical Therapy.
4. Submit three letters of reference: one from a science professor, one from an employer, and one character reference from a person of the candidate's choosing.

Ohio University Graduates

Prospective physical therapy students who have graduated from Ohio University are to:

1. Obtain a Re-enrollment Form from the Office of Admissions, Chubb Hall.
2. Complete and return the Re-enrollment Form to the Office of Admissions.
3. Obtain a Program Admission Form from the School of Physical Therapy.
4. Complete and return the Program Admission Form to the School of Physical Therapy.
5. Submit an official Ohio University transcript.
6. Submit three letters of reference: one from a science professor, one from an employer, and one character reference from a person of the candidate's choosing.

Transfer from Another Institution

Prospective students not in attendance at Ohio University are to apply to the University as transfer students.

1. Follow procedures for admission as a transfer student as outlined in this bulletin.
2. Submit transcripts from each of the post-secondary institutions attended. Transcripts must be forwarded by the institutions directly to the Office of Admissions and to the School of Physical Therapy.
3. Obtain a Physical Therapy Program Admission Form; complete and return to the School of Physical Therapy.
4. Submit three letters of reference: one from a science professor, one from an employer, and one character reference from a person of the candidate's choosing.

Entering Ohio University Freshmen

The professional education program in Physical Therapy is built upon a liberal arts and sciences foundation. A recommended route for completing these prerequisites is through enrollment in the College of Arts and Sciences' Zoology/Pre-Physical Therapy Program. For additional information please contact the dean's office in the College of Arts and Sciences.

SCHOOL OF PHYSICAL THERAPY

Cynthia Norkin, Director

The School of Physical Therapy offers an initial preparation program in physical therapy. Built on a pre-physical therapy liberal arts and sciences foundation, the professional education program will extend over a two-calendar year period of time and will lead to a baccalaureate degree. Based on the geographic location of Ohio University and some critical needs for physical therapy services, the program will focus on preparation of physical therapists for practice in rural community settings (small general hospitals, home health agencies, public

Selection Procedure

The two year program of study begins in June of each year. All application materials must be submitted to the Office of the School of Physical Therapy by January 5 of that year in order to be considered for admission.

A. Completed student folders will be reviewed by the Physical Therapy Admissions Committee. To be a candidate for the program the applicant must meet the following criteria:

1. Fulfillment of the general requirements for admission to Ohio University.
2. Completion of prerequisites for the Physical Therapy program. These prerequisites are:

Anatomy	6-8 qtr. hrs.
Chemistry	12 qtr. hrs.
English Composition	10-12 qtr. hrs.
Exercise Physiology*	6 qtr. hrs.
Kinesiology	4-6 qtr. hrs.
Philosophy**	9-12 qtr. hrs.
Physics	8-10 qtr. hrs.
Physiology	8 qtr. hrs.
Psychology***	12-15 qtr. hrs.
Sociology	8-10 qtr. hrs.
Statistics	5 qtr. hrs.
Zoology	8 qtr. hrs.

*Exercise Physiology: should include a laboratory component.

**Philosophy: should include courses in ethics and logic.

***Psychology: should include courses in childhood and abnormal psychology.

3. Completion of all requirements for the baccalaureate degree for Ohio University with the exception of the courses required in the professional physical therapy program. (See University General Education requirements in the *Graduation Requirements* section of this bulletin.)
 4. Attainment of a minimum GPA of 2.8 for all undergraduate work.
- B. Based on information received, the Admissions Committee will screen applicants and then schedule personal

interviews with selected applicants as a next level of screening. No more than 32 students will be admitted yearly.

Applicants will be notified of acceptance by April 15.

Program of Study

The following is a listing of the courses required in the two-calendar year professional education program in Physical Therapy.

PT 410 Human Anatomy and Dissection (4 lec, 8 lab)	7
PT 431 Professional Role Issues (4 lec)	4
PT 441*** Community Practice Problems I (2 lec, 6 lab)	3
PT 442 Community Practice Problems II (2 lec, 6 lab)	3
PT 443 Community Practice Problems III (2 lec, 6 lab)	3
PT 451 Musculoskeletal Problems I (3 lec, 6 lab)	5
PT 452 Musculoskeletal Problems II (3 lec, 6 lab)	5
PT 454 Respiratory Problems (2 lec, 4 lab)	4
PT 457 Cardiovascular Problems (2 lec, 4 lab)	4
PT 459 General Medical Surgical Problems (2 lec, 4 lab)	4
PT 425 Principles of Clinical Teaching (4 lec)	4
PT 448* Clinical Practicum I	8
PT 444 Community Practice Problems IV (2 lec, 6 lab)	3
PT 446 Community Practice Problems V (2 lec, 6 lab)	3
PT 455 Neuromuscular Problems I (3 lec, 6 lab)	5
PT 456 Neuromuscular Problems II (3 lec, 6 lab)	5
PT 426 Research Seminar (4 lec)	4
PT 449* Clinical Practicum II	10
PT 490 Independent Study (1-4 lec)	1-4
HLTH 301 Introduction to Health Care Organizations (4 lec)	4
HLTH 370 Community Health Problems (4 lec)	4
HLTH 402 Contemporary Problems in Health Care (4 lec)	4
SOC 351 Elementary Research Techniques (4 lec)	4
Elective**(Tier III)	4
Electives**	8

*The clinical practica are full 40-hour-week experiences.

Clinical Practicum I is 8 weeks in length. Clinical Practicum II is 10 weeks in length.

**The student will choose electives in consultation with the faculty advisor.

***Community practice problems courses will entail periodic local travel away from the main campus. Therefore, students are *responsible* for transportation to clinical sites.

Honors Tutorial College

Margaret F. Cohn, *Director*

To meet the interests of creative, high-ability students, the Honors Tutorial College offers challenging opportunities to students admitted to the Tutorial Program and to other undergraduates qualified for the Departmental Honors Program.

THE TUTORIAL PROGRAM

This unique honors program is modeled on the educational method used in British universities, notably Oxford and Cambridge. Although other colleges and universities have adopted particular features of this model, Ohio University is the only institution in the United States that has a degree-granting college incorporating all the essential features of the traditional tutorial system. The Honors Tutorial College enrolls approximately 150 full-time undergraduate students.

Goals of the Program

- To provide the qualified student with a flexible and personalized alternative at the undergraduate level.
- To provide an intensified learning experience by:
 - Replacing lecture by tutorial in the student's major.
 - Permitting each student to progress at an optimum pace.
 - Promoting advanced competency in a specific field.
 - Allowing the student to earn a bachelor's degree in three years.
 - Encouraging the student to develop critical perceptions as well as creative and intellectual independence.
 - Acquainting the student with accomplished scholars through the one-to-one tutorial relationship.
 - Fostering a living-learning environment in a special residence hall.
- To provide the career-oriented student with practical training through internships and other individually arranged educational experiences.

A One-to-One Learning Experience

The most important aspect of the program is the tutorial, required in the student's major, occasionally available in a secondary field. During this weekly conference the student and tutor discuss previously assigned topics, posing new questions and problems for later discussion. Since the student is expected to participate actively during tu-

torials, independent preparation occupies much of the student's time between sessions.

The rapport established in this one-to-one relationship enhances learning and facilitates rapid progress in the field. It also ensures that the student's ability and specific interests are reflected in the content of tutorials.

Honors Tutorial Majors

Through formal arrangements with various academic departments in the University, the Honors Tutorial College offers majors in:

Botany	Management
Chemistry	Marketing
Economics	Mathematics
Engineering Physics	Philosophy
English	Physics and Astronomy
French	Political Science
Geography	Psychology
Hearing and Speech Sciences	Sociology
History	Spanish
Interpersonal Communication	Telecommunications
Journalism	Theater
	Zoological and Biomedical Sciences

Only these disciplines are available as tutorial majors at the present time.

Participating departments have well-established research facilities, and the tutors are full-time faculty with many years of professional experience.

Tutorial students preparing for careers in law may major in any of the above areas or choose special prelaw programs in economics, history, philosophy, and political science.

Detailed descriptions of departmental programs in tutorial studies can be obtained by contacting the director of the Honors Tutorial College, 35 Park Place, Athens, Ohio 45701-2979 (614/594-5810).

Individualized Program

To ensure both supervised structure and independent choice, each participating department has a director of studies who coordinates the programs of tutorial students in that major. Combining departmental requirements and the student's personal interests, the director helps to develop a curriculum that best meets the needs of the individual student.

While preparation for advanced training in a particular discipline remains the overall objective of the tutorial program, pursuit of other intellectual or creative inclinations finds encouragement and helpful advice. The student's curriculum is guided by an advisor or master tutor throughout the three- or four-year program.

Major requirements generally include a sequence of tutorials, collateral studies, lectures, seminars, comprehensive examinations, and, in some areas, laboratory, field, or studio work. The student also completes a research thesis or creative project under the direction of a faculty member.

Examinations

In most tutorial majors, students take comprehensive examinations. When the tutor judges that the student has thoroughly mastered all relevant material, a comprehensive is given to test competency, either in the field as a whole or in a selected portion of it. Like the tutorial, these examinations require, on an expanded scale, that the student assimilate information and consider it again in the light of other knowledge and experience.

Since the tutorial system works best when the faculty-student relationship is free from the pressure of formal examinations, departmental committees prepare and grade comprehensive examinations. However, the tutor may, at any time, use a variety of methods to test the student's grasp of ideas and to assess his or her progress. This process not only intensifies the student's participation in tutorials but also forms the basis for the tutor's quarterly evaluation, a report notifying both the college and the student that satisfactory progress is being made or that specific problems require attention.

Degree Requirements

Since the essential feature of the program is measurable competency in a specific field, the Honors Tutorial College has neither fixed hour and residency requirements nor distribution of courses necessary for graduation. Completion of departmental requirements and English composition constitutes the minimum requirement for a bachelor's degree.

Participating departments set their own degree requirements, which students must fulfill to earn a bachelor's degree. In this respect, the tutorial curriculum functions much like a graduate program. Each department has developed a course of study designed to give its students mastery of the field at an advanced undergraduate level. When the department is satisfied that all tutorial requirements have been met, the student may graduate from Ohio University with a degree in that major. To remain in the program, students must maintain a 3.0 grade-point average.

A Bachelor's Degree in Three Years

Most of the tutorial programs enable a student to graduate in three years, although additional time may be desirable in a variety of circumstances. Graduates of the Honors Tutorial College frequently find their level of preparation comparable to that of students entering their second year of graduate work.

Degrees conferred by the college include the bachelor of fine arts, bachelor of science in journalism, bachelor of science in communications, bachelor of arts in (major), bachelor of science in (major), and bachelor of business administration in (major).

Housing Privileges

Students admitted to the Honors Tutorial College are invited to live in Hoover House, an intensive-study dormi-

tory on the New South Green. Located among upperclass residence halls, Hoover House provides an environment conducive to mature self-discipline and intellectual dialogue. While most tutorial students choose this unique living-learning opportunity, alternate University housing is available for those who prefer it.

Selectivity and Admission

Tutorial studies are available only to the well-qualified, highly motivated student who wants to pursue one of the 23 academic areas listed above. Students apply for admission to specific disciplines.

With the approval of participating departments, the college admits a limited number of majors each year. Although most eligible students enter the program at the freshman level, others apply after completing a year of undergraduate work. Transfer and reentry students are also frequently admitted.

The college requires excellent academic credentials. Standardized test scores, high school records, and recommendations from teachers or counselors all help to determine an applicant's eligibility. Students must fill out the standard Ohio University application form and submit it to the Honors Tutorial College by February 15 of the year they wish to enter. Applications for early admission are treated on a rolling basis until that date. Unsuccessful candidates may reapply provided that they attain an outstanding record in another college after two or more quarters.

DEPARTMENTAL HONORS PROGRAM

An outstanding student in his or her last undergraduate year at Ohio University may choose to earn departmental honors by presenting a thesis in the major. Depending upon the field, the thesis may be either an expository or creative piece of original work, the result of supervised research or a collection of artistic endeavors. A departmental thesis advisor helps in the decision of an appropriate project and guides the student toward completion of the thesis.

Before enrolling for departmental honors, the student should discuss the project with the faculty member who will serve as his or her thesis advisor. Departments determine eligibility for the program and suitability of the proposed thesis. After the proposal is approved, the student should apply for departmental honors on the forms available at the Honors Tutorial College (35 Park Place) and register for up to 15 hours of study under the departmental thesis advisor.

A student choosing this option is responsible for informing the Honors Tutorial College of the nature of the project by submitting a brief synopsis of the intended work or a copy of the proposal. The student must also inform the college at least a month prior to graduation that he or she expects to graduate with "Honors in _____," so that the proper recognition can be given at Commencement and inscribed on the degree. When applying for graduation, the student should be sure to indicate on the form that he or she is completing an honors project.

Following departmental approval of the completed thesis, the student submits it to the Honors Tutorial College for final confirmation. Naturally, in order to graduate with departmental honors, the student must also have satisfied all the University, college, and major requirements, as well as any additional honors criteria required by his or her department (such as a particular grade-point average). Since the thesis option necessitates some advance planning, the interested student would do well to begin planning this program during the junior year.

Center for International Studies

Felix V. Gagliano, *Associate Provost for International Programs*

Ohio University established the Center for International Studies in 1964 to provide students and citizens of the United States and other countries with opportunities to obtain knowledge about peoples and cultures of the world, particularly Africa, Asia, and Latin America, and about related international concerns. This endeavor is founded on the broad belief that an appreciation of different values and institutions increases understanding between peoples, enriches the lives of individuals, and assists all in forming opinions on issues which affect the growing world community.

The center coordinates teaching, research, and publications activities through programs related to three world regions — the African Studies Program, the Latin American Studies Program, the Southeast Asian Studies Program — and comparative and international topics. These programs assist in the development of courses and the expansion of library materials. They support visiting lecturers, film series, seminars, and colloquia throughout the year. More than 100 scholarly papers relating to Africa, Southeast Asia, and Latin America have appeared in the center's publication program. An East Asia Committee also functions with some modest support from the center.

Major in International Studies

Through the College of Arts and Sciences the center offers an undergraduate major in international studies. See the *Courses of Instruction* section of this bulletin for program requirements.

Undergraduate Certificate

The center offers certificates in African, Asian, and Latin American studies to benefit students who wish to add an international dimension to their majors as well as those interested in international careers or planning graduate work in area studies. The proper notification is placed on the student's official transcript upon completion of the requirements. Requirements for the certificate are listed under International Studies in the *Courses of Instruction* section of this catalog.

Languages and Literatures

Ohio University offers courses in foreign languages relevant to Africa, Asia, and Latin America, including

Arabic and Swahili (Africa); Chinese, Indonesian/Malaysian, and Japanese (Asia); and Spanish (Latin America). These languages fulfill the language requirements in the College of Arts and Sciences. A detailed description of languages and literatures is under the Foreign Languages and Literatures heading in the *Courses of Instruction* section of this catalog.

Courses

Three area interdisciplinary courses are available through the center. These are Africa (INST 113), Asia (INST 103), and Latin America (INST 121). These courses, which provide an introduction to the regions, satisfy social science requirements, University General Education Tier II (third world cultures) requirements, as well as certificate requirements. In addition, 65 faculty members in the various departments on campus teach over 150 courses each year that relate to African, Asian, and Latin American Studies.

Below is a list of principal courses relevant to African Studies, Asian Studies, Latin American Studies, and International Affairs. Please check the complete course descriptions under the various departments.

Afro-American Studies

113	Literature of Africa: Introduction
210	Afro-American Literature I
211	Afro-American Literature II
315	Literature of West Africa
316	Literature of South Africa
317	Caribbean Literature: Major Authors and Movements
364	Comparative Study of Injustice
432	Problems of National Oppression

Anthropology

350	Economic Anthropology
351	Political Anthropology
357	Anthropology of Religion
358	Women: A Cross-Cultural Survey
366	Cultures of the Americas
377	Peasant Communities
381	Cultures of Sub-Saharan Africa
385	Cultures of Southeast Asia
386	Problems in Southeast Asian Anthropology
387	Cultures of Oceania

Arabic

All courses

Art History

- 327 Art of the 19th Century
- 328 Modern Art
- 330 The Arts of the Orient
- 331 Pre-Columbian Art
- 332 African Art

Business Administration

- 485 Multinational Business

Chinese

All courses

Comparative Art

- 321, 322, 323 History and Literature of Music
- 327, 328, 329 Cultural Traditions and the Arts
- 475 19th-Century European Theater
- 476 Contemporary Theater

Dance

- 250 Ethnic Dance of Nonwestern Cultures
- 255 Ethnic Dance of Western Cultures

Economics

- 307 History of Economic Thought
- 308 Modern Economic Thought
- 310 Urban Economics
- 350 Economic Development
- 351 Agricultural Development
- 353 European Economic History
- 354 Latin American Economic History
- 371 Economics of Planning
- 372 Economics of the Soviet Union
- 441 International Economic Policy
- 455 African Economic Development
- 473 Economics of Southeast Asia
- 474 Economics of Latin America
- 475 Chinese Economy

Education

- 425A Education and Development in Africa
- 425B Education and Development in Asia
- 425C Education and Development in Latin America
- 432 Perspectives in International Education

Engineering

- 320 History of Western Technology

English

- 204 Intro to International Literature I:
The Classical Tradition
- 205 Intro to International Literature II:
Romantic Tradition
- 206 Intro to International Literature III:
The Modern Tradition
- 306A, B, C Studies in Oriental Literature
- 314 Romantic and Victorian Literature
- 316 English and Continental Literature
- 461 Colloquium

Finance

- 455 International Finance

Foreign Literatures in English

- 334 Portuguese and Brazilian Literature in English
- 335 Italian Literature in English
- 336 Spanish Literature in English
- 337 French Literature in English

338A

338B

339A

339B

German Literature in English

German Novel in English

Russian Literature in English

Soviet Literature in English

French

- 348, 349 French Civilizations and Culture

Geography

- 130 Econ Geog
- 140 World Regional Geog - Eurasia
- 141 World Regional Geog - Africa and Oceania
- 142 World Regional Geog - Western Hemisphere
- 325 Prin of Political Geog
- 331 Geog of Agricultural Activity
- 340 Geog of Western Europe
- 345 Contemporary Southeast Asia
- 351 Geog of Sub-Saharan Africa I - Systematic
- 352 Geog of Sub-Saharan Africa II - Regional
- 422 Population Geography
- 494 Field Problems

German

- 348, 349 German Culture and Civilizations

History

- 101, 102, 103 Western Civilizations in Modern Times
- 243 Issues in Modern Latin American History
- 316A, B, C History of U.S. Foreign Relations
- 322 Latin America in the 19th Century
- 323A Latin America Survey: Colonial Period
- 323B Latin America Survey: National Period
- 325 Inter-American Relations
- 326A Recent Latin America: Argentina,
Brazil and Mexico
- 326B Recent Latin America: Andean Nations
- 326C Recent Latin America: Central America and
the Island Republics
- 336A North Africa in Modern Times
- 336B North Africa Since 1914
- 338 History of West Africa
- 338A History of East Africa
- 341A Africa to the 17th Century
- 341B Africa from the 17th to the Late 19th Century
- 341C Africa from the Late 19th Century
to the Present Day
- 342 History of South Africa
- 343 Revolutions in Southern Africa
- 344A History of the Malay World
- 344B History of Burma and Thailand
- 344C History of Vietnam
- 344D Chinese in Southeast Asia
- 345A Southeast Asia to c. 1750: The Creative
Synthesis
- 345B Southeast Asia, c. 1750 to 1942: Change and
Conflict
- 345C Southeast Asia, 1942 to the Present:
The Search for Stability
- 346A Traditional China
- 346B Modern China
- 348A Traditional Japan
- 348B Modern Japan
- 350 The Civilization of India
- 356A The Italian Renaissance
- 356B The Northern Renaissance
- 356C The Reformation
- 358A Early Modern Europe, 1559-1648
- 358B Early Modern Europe, 1648-1715
- 358C Early Modern Europe, 1715-1774
- 362A Europe, 1814-1871
- 362B Europe, 1871-1914
- 364A Europe Between World Wars
- 364B Contemporary Europe
- 366A Modern France in the 19th Century
- 366B Modern France in the 20th Century
- 368A Modern Germany in the 19th Century
- 368B Modern Germany in the 20th Century

370	History of the Byzantine Empire, 324-1453
372A	Balkans in Early Modern Period, 1453-1804
372B	Balkans in 19th Century, 1804-1878
372C	Balkans in 20th Century, 1878 to Present
374A	Balance of Power: Napoleon to the Kaiser
374B	History of International Diplomacy, 1914-1939
374C	History of International Diplomacy, 1939-Present
376J	Biography: Leaders in 19th-Century Europe
382A	History of Russia
382B	The Communist Revolution
382C	Soviet Union
390A	Tudor England
390B	Stuart England
391A	English History to 1688
391B	English History Since 1688
392A	Georgian England
392B	Victorian England
392C	20th-Century England
441	Studies in African History
445	Studies in the History of Southeast Asia
449	Studies in the History of East Asia in Modern Times
483	Studies in Russian and Soviet History

Indonesian/Malaysian

All courses

International Studies

103	Modern Asia
113	Modern Africa
121	Interdisciplinary Survey of Latin America

Italian

348, 349	Italian Civilizations and Culture
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Japanese

All courses

Journalism

466	International Communications
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Linguistics

395	Introduction to Area Linguistics
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Management

484	International Comparative Management
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Marketing

441	International Marketing
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Philosophy

314	19th-Century European Philosophy
358	Existentialism
370	Hinduism
371	Buddhism
372	Islam
428	Continental Rationalism

429	British Empiricism
444	Philosophy of Marxism
452	Myth and Symbolism
458	Contemporary German Philosophy
459	Contemporary French Philosophy
460	Contemporary Religious Thought
475	Chinese Philosophy
476	Indian Philosophy
477	Buddhist Philosophy

Political Science

331	Politics in Western Europe
333	Politics in the Soviet Union
354	American Foreign Policy
372	Modern Political Thought
373	Contemporary Political Thought
432	Policy-Making in the U.S.S.R.
433	Soviet Foreign Policy
434	Government and Politics in Latin America
435	Revolution in Latin America
436	The Politics of Brazil
437	British Parliamentary Patterns
438	Government and Politics of Germany
439	Politics in France
441	Government and Politics of Africa
445	Government and Politics of Japan
446	Government and Politics of China
447A, B	Government and Politics of Southeast Asia
452	Advanced International Relations
455	International Law
456	International Organizations
459	Arms Control and Disarmament
461	Weak States in World Politics
474	19th Century Political Thought
479	Latin American Political Thought
490	Studies in Political Science

Russian

348, 349	Cultural History of Russia
355, 356	Introduction to Russian Literature

Southeast Asian Literature

340	Traditional Literature of Southeast Asia
345	Modern Literature of Southeast Asia

Sociology

340	Population Analysis
352	Field Studies in Sociology
408	Latin American Society

Spanish

341, 342, 343	Advanced Conversation and Composition
348	Spanish Civilizations and Culture
349	Spanish American Civilization and Culture
443, 444	Survey of Spanish American Literature
447	Themes from Spanish American Prose
448	Contemporary Spanish American Prose

Swahili

All courses

Office of Lifelong Learning

Joseph B. Tucker, *Associate Vice Provost*

Michael Mark, *Adult Learning Services*

Andrew Chonko, *Continuing Education, Conferences, and Workshops*

Richard Moffitt, *Independent Study*

Curtis Johnson, *International Education*

The Office of Lifelong Learning is the administrative umbrella under which the following offices operate: Continuing Education, Conferences, and Workshops; Adult Learning Services; Independent Study; and International Education. Its purpose is to provide lifelong learning opportunities beyond the regular channels of the University by utilizing the resources of the University in nontraditional ways.

Classes, independent study courses, workshops, and seminars are planned as requests and need indicate. Both credit and noncredit programs are offered and may or may not lead to a degree. Students seeking admission to a degree program must be admitted through regular Ohio University procedures. Participants in designated noncredit courses may be awarded continuing education units (CEUs).

Programs of special interest to audiences beyond the traditional credit-seeking student include the Senior Citizens Program and the Informal Community Learners Program. The Senior Citizens Program began fall quarter, 1973, and provides opportunity for Ohio residents who are 60 years of age or older to participate in many University courses at no cost to the participant.

The Informal Community Learners Program (ICLP) allows any resident of the Ohio University community who is not currently enrolled for credit to be admitted on a space-available basis to any undergraduate class offered by the University. University credit cannot be earned through ICLP or the Senior Citizens Program.

ADULT LEARNING SERVICES

The Office of Adult Learning Services is responsible for the development of new programs and services for the adult learner. This office provides information and counseling for the person interested in the assessment of college-level learning from prior experiences and attempts to link learners to various resources to meet their educational needs.

The **External Student Program** is available to students who wish to earn either the associate or bachelor's degree primarily through the various Independent Study options or in combination with residential work. Services offered through this program include evaluation of previous college-level work and degree planning.

The **Experiential Learning Program** is designed to award credit for college-level learning acquired through work and life experiences. Adult learners enroll in a four-hour credit course titled "Portfolio Development." This is

an approved college course which assists the adult learner in documenting acquired learning. Up to one full year of college credit may be awarded toward a four-year degree.

Computerized Interactive Career Guidance for Adults. SIGI, ENCORE, and OCIS systems are used in career planning groups for adults, as well as being available to enrolled students on an individual basis.

Career Planning for Adults is offered by Adult Learning Services through special workshops, credit classes, and life/career planning groups. A small library is available for adult career resources.

CONTINUING EDUCATION, CONFERENCES, AND WORKSHOPS

The Office of Continuing Education, Conferences, and Workshops offers a wide range of credit and noncredit classes and programs designed to serve the lifelong learning needs of individuals not enrolled in a University degree program. The office makes available a coordinator who serves as a consultant to anyone wanting assistance in planning a course, workshop, conference, or similar educational venture.

In addition, the office plans and develops its own programs and courses to meet the educational needs of the public at the local, state, and national levels. Its administrative services include program design, budgeting, program promotion, requisitioning of supplies and materials, registration, arranging food service and housing, reserving facilities and equipment, and program evaluation.

The standard University tuition fee is charged for credit coursework while each noncredit program has a fee determined by direct costs. Formal admission to the University is necessary only for credit courses.

More than 300 workshops, seminars, conferences, and courses are conducted on the Athens campus each year, including such diverse programs as the Coal Preparation Conference, Austrian-American Studies Institute, Ohio School of Banking, Credit Union Institute, band camps, annual publications and forensics workshops for high school students, summer short courses for teachers, and boys' and girls' sports clinics.

Inquiries are welcome from any individual, business, or special-interest group interested in utilizing University expertise and/or facilities. Programs may be conducted either on campus or at off-campus sites such as industrial plants, public schools, or libraries.

Continuing Education provides evening and weekend credit classes at the graduate and undergraduate lev-

els for the nontraditional student; certificate programs in real estate, management, and other career development areas; and experimental classes offered to determine their viability in a degree-oriented program. The Communiversi-ty program offers each quarter a wide array of educational and avocational classes designed for area residents. Programs for varied interest groups including business and industry, social service agencies, and professional and civic groups, among others, are also established.

Workshops assists various schools and departments within the University to plan, organize, and conduct short, intensive workshops which feature practical hands-on experiences and presuppose active participation on the part of enrollees.

Conferences serves as the University's contact with outside organizations who contract for use of the University's staff or facilities for educational programs and avocational activities. Such groups include the English Handbell Ringers, Boy Scouts, and the Rainbow Girls Assembly.

INDEPENDENT STUDY

The Independent Study Program provides a number of flexible ways by which a person may pursue college-level work and earn college credit. In some cases degrees may be earned without some of the limitations imposed by the traditional university structure. Independent Study allows an individual to learn at the time, place, and rate suited to his or her own particular needs and provides the administrative format for the validation of nontraditional learning and life experience.

Independent Study Courses provide a highly structured method of independent study involving a tutorial relationship with a faculty member who guides the student's learning and monitors his or her progress. A detailed study guide prepared by the professor responsible for the course is sent to each student. This publication contains an overview of the course and directs the student's learning as the textbooks, cassette audio tapes, and other educational materials, devices, and techniques are used. The student submits written assignments which are evaluated and commented on by the professor. Supervised examinations at the student's location are generally required.

Independent Study Projects can sometimes be arranged in undergraduate courses not currently available as independent study courses. These arrangements are made on an individual basis and are contingent upon the

approval of the department in which the course is offered and the availability of a qualified faculty member willing to direct the project. This is an unstructured form of independent study which can be used most effectively by the experienced student. The student and the faculty member agree upon the conditions which must be fulfilled for credit to be awarded. The work may include a variety of readings, papers, projects, and examinations.

Course Credit by Examination represents the least structured method of obtaining college credit through the Independent Study Program. The participant receives at the time of enrollment a brief prospectus which describes the nature of the course, the textbooks and other materials needed, as well as the nature of the supervised examination. The student prepares for the examination without intermediate assistance from a faculty member. Letter grades and credit are awarded for performance on the examination.

The College Level Examination Program (CLEP) is especially useful for the adult who has had no previous college experience but whose work or life experience may be the basis for college credit. It is also useful for the beginning college student who has had an enriched high school experience. The program is sponsored by the College Entrance Examination Board, and the Independent Study Office serves as an open test center administering examinations by appointment on Saturday of the third week of each month. Subject to approval by the appropriate department in each case, the University will allow credit for satisfactory performance on the CLEP subject-matter examinations, provided that the examinations are taken prior to formal enrollment at Ohio University. The University does not award any credit for scores achieved on the CLEP General Examinations. Detailed information is available in a special publication which can be supplied on request.

INTERNATIONAL EDUCATION

The role of the Office of International Education underscores the University's commitment to the international community and education for interdependence. The International Education Office initiates, develops, and facilitates programs compatible with University goals and capabilities. These programs may be conducted on the Athens campus, or, if academically appropriate, faculty are employed to teach in programs established at locations in foreign countries. The International Education Office works with foreign governments, foreign and U.S. businesses, educational institutions, and the United States government in its efforts to identify and develop appropriate educational programs.

Regional Campuses

Ohio University has four campuses, other than the Athens campus, located in Belmont County, Chillicothe, Lancaster, and Zanesville; a branch at Ironton; and a resident credit center at Portsmouth.

The primary objective of the regional campuses is to offer a broad program at the freshman and sophomore levels. Each location has a full two-year curriculum in the arts and sciences, business administration, and education, with selected courses in specialized fields such as engineering and fine arts. Students are eligible to receive the associate in arts or the associate in science degree after completing an approved two-year program of study. Available at some locations are specialized two-year programs leading to the associate in applied business or associate in applied science, designed as preparation for specific career opportunities in the immediate area. In selected areas, students pursue upper-level and graduate courses.

The admission policies for the regional campuses are the same as those of the Athens campus. Ohio high school graduating seniors who can commute from home to one of the regional campuses will be admitted as regular full-time or special part-time students. This decision is based on the high school transcript, Scholastic Aptitude Test, or the American College Test (preferred). The regional campuses have no residence halls.

University College

Samuel R. Crowl, *Dean*
William L. Allen, *Associate Dean*
Richard L. Harvey, *Assistant Dean*
Richard K. Brackin, *Assistant to the Dean*
David Dabelko, *Director, Criminal Justice Program*
Mark Graham, Laura Cross Chapman,
Ernestine Montgomery, *Counselors*

University College is designed primarily to meet the needs of: (1) freshman students who are exploring options leading to their educational and career goals; (2) students fulfilling University General Education requirements; (3) special students; (4) associate degree students on the Athens campus; and (5) students seeking degrees through the Bachelor of General Studies Program or the Bachelor of Criminal Justice Program. The Criminal Justice Program is available to students who have earned associate degrees in related disciplines. The college staff manages orientation/advisement programs, such as Precollege, which assist students in reviewing their interests, planning academic programs, and adjusting to University life.

UNIVERSITY COLLEGE PROGRAMS

Academic Advising and Counseling

No single activity of University College requires more time or is given a higher priority than advising and counseling. It is the responsibility of University College to inform students about the existing academic options and assist them in coming to decisions about how they can best use the University to facilitate their growth and development.

Entering students able to identify a preferred area of study are admitted directly to the degree college of their choice and are assigned faculty advisors representing their major department. Exploratory students, or those who wish to investigate several academic options prior to settling into a major, are admitted to University College. An exploratory student is assigned an academic advisor who is a full-time professor on the teaching faculty as well as a counselor from the University College staff to whom the student may turn for information and advice about choosing a major program of study and understanding a wide variety of University customs and regulations. Associate degree, general studies, and special students are also assigned University College counselors who help

them plan an appropriate program. In addition, upper-classmen in all colleges may seek out counseling in University College when their questions touch on University-wide issues or University College programs.

Students in the University College are encouraged at entry to follow the requirements of degree programs. Students with tentative majors should refer to those requirements as outlined elsewhere in this catalog.

All freshman students, regardless of intended major or college of entry, are required to meet the University General Education requirement for freshmen. This includes proficiency in English composition and in basic quantitative skills.

To assist students in meeting these University General Education requirements, a series of placement examinations in reading, writing, and mathematics is required of all entering students. These examinations are administered each quarter as an integral part of the freshman orientation program.

During the freshman orientation program each quarter, with the placement test results as an aid, the University College staff will assist each student in selecting appropriate first-quarter courses as well as the appropriate entry level for each course. A full-time schedule covered by the regular fee is between 12 and 20 quarter hours, with 16 hours being the average.

General Education

In 1979 the faculty of Ohio University adopted a comprehensive General Education program required of all baccalaureate degree students. University College is responsible for coordinating the various facets of this program including providing administrative support for the English Composition Advisory Council, the University Advising Council, and the Council on General Education. The goal of these activities is to ensure that all undergraduate students participate in a common curriculum as well as fulfilling the specific requirements of their individual colleges and major fields of study.

Precollege Freshman Program

Each year during July and August University College conducts an academic Precollege Orientation Program designed to acquaint freshmen and their parents with the programs of the University. Precollege results in a completed schedule and registration for each student. Students meet with undergraduate student counselors, University College professional counselors, and faculty advisors for assistance in planning their academic programs. Abbreviated orientation and advising programs are also held following Precollege and prior to the fall, winter, spring, and summer quarters for freshman, transferring, reenrolling, relocating, and special students.

Freshman Interdisciplinary Course

Each year University College sponsors a special interdisciplinary course for freshmen, entitled "The University Experience" (UC 115). The course is designed to help first-quarter freshmen adjust to the expectations of the potential problems encountered in university life. UC 115 is intended to meet the special needs of those students who are particularly undecided about their educational and career objectives and who have serious doubts about their preparedness for college life. Topics covered include university organization and resources, study skills, time management, degree requirements, values clarification, academic major selection, and career planning.

University Professor Program

To acknowledge outstanding undergraduate teaching, students of Ohio University each year select six University Professors. University Professors are full-time faculty who have demonstrated noteworthy teaching ability and an effective insight into educational processes.

Upon selection by the student University Professor Selection Committee and final appointment by the provost, each professor is granted a release from half his or her teaching duties and \$1000 for educational support or professional development. The professor uses this opportunity to teach at least two classes of his or her own choosing.

At the present time this program is limited to the main campus.

The University Professor Selection Committee consists of three student representatives, from each undergraduate college, appointed by the dean, plus several at-large representatives.

The selection procedure has three parts:

1. Campus-wide nominations by ballot of outstanding full-time professors. This occurs early in the academic year.
2. Selection of the top nominees as a result of committee examination and class visitation during winter quarter.
3. Official appointment by the provost after consultation with the respective department chairmen and deans.

Project CAP

Project CAP, or the College Adjustment Program, helps freshmen to adjust to college living and to succeed in their academic pursuits. Sponsored by the Academic Advancement Center in conjunction with the University College, Project CAP is available to freshmen (1) whose high school grades and test scores suggest that they will have trouble adjusting to college-level work; and (2) who also meet income criteria specified by federal regulations.

During their first quarter, freshmen in Project CAP are usually enrolled in three courses:

University College 112 "Speed Reading and Comprehension"	2 credits
English 150 or 151	(depending on writing placement) 4 or 5 credits

As the titles suggest, these courses concentrate on developing reading, writing, and study skills, which are absolutely necessary for college success. In addition to these courses, each student will choose other appropriate coursework in consultation with an advisor.

Project CAP, in addition to coursework, provides tutoring services throughout the first year. Free, private tutoring is available upon request in any academic course where extra help is desired.

Project CAP also offers counseling services to its students. The counseling staff assists students in dealing with adjustments to University life, career development, personal problems, and academic advising. Counselors maintain contact with the students through individual and small group sessions to prevent major problems from arising.

By combining skills courses, tutoring, and counseling assistance, Project CAP develops each student's competence and confidence. Questions may be directed to the Academic Advancement Center, Alden Library, Ohio University, Athens, Ohio, 45701-2979 (614/594-6058).

DEGREE PROGRAMS

BACHELOR OF GENERAL STUDIES

The Bachelor of General Studies Program provides an opportunity for undergraduate students at Ohio University to design their own education. The student with high motivation, an exceptional background, or an unusual combination of talents and interests may find this degree program useful in attaining his or her goals. The program is geared toward four categories of students: (1) the student who is uncertain about career goals and wishes to utilize University resources for career exploration; (2) the student who desires to obtain an education motivated only by self-interest with no apparent intent to utilize the education for career purposes; (3) the student who knows what it is he or she wants to become but wishes to pursue a nontraditional approach in attaining that goal; and (4) the student who wants to combine the available University resources to create an entirely unique field of study not currently available in the curriculum offerings.

Students seeking to enter graduate school or one of the established professions may find that following the patterns suggested by the various disciplines may be more useful to them simply because the traditional degrees have greater visibility in the world and will more readily suggest the nature of their academic accomplishments to others. The Bachelor of General Studies Program is an acknowledgement that the existing degree programs, as varied as they are at Ohio University, cannot satisfy the legitimate educational requirements of all students. The General Studies Program provides the means by which individual students may, with the help of a University College counselor, determine the structure of their degree programs.

To enter the General Studies Program, the student must complete an application form which is available in the University College Office or at one of the regional campuses and have the completed application reviewed by a member of the University College staff. Final admission to the General Studies Program is granted only upon review of the application by the Bachelor of General Studies Review Sub-Committee which is composed of students, faculty, and administrators.

University College 110 "Effective Study Skills" 2 credits

The student must meet the following criteria before submitting an application to the General Studies Program for consideration:

1. Current enrollment with regular student status;
2. Achievement of sophomore rank;
3. An overall 2.0 accumulative grade-point average.

A student must meet the following requirements to graduate in the General Studies Program:

1. Earn 192 credit hours, at least 90 of which must be in junior- or senior-level courses (courses with catalog numbers at the 300 level or above as shown in the *Ohio University Bulletin*).

2. Earn a minimum of a 2.0 accumulative grade-point average based on the 192 credit hours.

3. Complete no fewer than 45 credit hours of Ohio University credit (B.G.S. residence requirement) after being admitted to the General Studies Program, excluding any courses registered for prior to admission to the program. This includes any transfer, transient, Course Credit by Examination, Independent Study coursework, etc., for which the initial registration was completed prior to seeking admission to the General Studies Program.

4. Complete a minimum of 45 credit hours in a self-selected area of concentration which has been approved by the Bachelor of General Studies Review Sub-Committee. The 45-hour concentration area is designed by the student and may include either work from one department or a combination of coursework from two or more related departments. The courses included in the concentration area become course requirements for graduation subject to change only by prior permission from a University College counselor, and in some cases the Bachelor of General Studies Review Sub-Committee. The prospective general studies student is advised to work closely with a faculty or resource person in the field of interest to elicit suggestions for constructing an appropriate program of study.

5. Complete the University General Education requirements.

6. Satisfactorily complete the minimum of 48 credit hours of Ohio University coursework to satisfy the University residence requirement.

Applications may be submitted at any time during the quarter except in the case of seniors. Seniors must submit completed applications no later than the end of the fifth week of the quarter (end of two and one-half weeks during summer) to have current credit hours included as part of the total 45 credits needed after admission to the General Studies Program (subject to the exclusions listed in item 3 above, etc.). The deadlines to submit applications and have current credit hours included as part of the B.G.S. residence requirement are as follows:

Fall Quarter 1984-85

Deadline — October 12, 1984

Winter Quarter 1984-85

Deadline — February 1, 1985

Spring Quarter 1984-85

Deadline — April 26, 1985

Summer Quarter 1984-85

Deadlines — 1st Session — July 2, 1985

2nd Session — August 6, 1985

BACHELOR OF CRIMINAL JUSTICE

The upperdivision Criminal Justice Program is designed specifically for students who have previously completed an associate degree program in an area related to criminal justice, such as law enforcement, corrections technology, or police administration. Students who hold such degrees from technical or community colleges or from a regional campus of Ohio University are able to

enter directly into the Criminal Justice Program and complete the baccalaureate degree in two years.

This program offers students with technical education backgrounds the opportunity to broaden their exposure to liberal higher education, while acquiring the necessary specialization to qualify for careers in such fields as parole and probation, forensic science, adult and juvenile corrections, and police administration. Criminal justice students may also prepare for law school or for further study in graduate or professional schools.

The flexible, interdisciplinary curriculum is composed of a broad range of courses from the social and behavioral sciences, humanities, natural sciences, and professional disciplines, all of which make a contribution to the complex field of criminal justice. Students also have the opportunity to design individualized programs of study to a significant degree with elective courses which relate to their career goals.

To enter the Criminal Justice Program, a student must complete an application form and submit a college transcript showing that he or she has completed an associate degree in an appropriate field. Upon entrance, the student will be assigned a faculty advisor who will assist in designing a program of study.

Degree requirements are as follows:

1. A total of 96 credit hours, beyond a minimum of 96 hours earned in an acceptable associate degree program.

2. Of the 96 hours in the criminal justice curriculum, 45 hours must be at the 300 level or above.

3. Within the total 192 hours, two courses in humanities and two courses in natural science and/or mathematics must be completed.

4. All students must complete no fewer than 12 courses from within the following core areas: **Area I: Basic skills** (Choose three courses, one each from A, B, and C) — (A) ENG 308J, IT 370J, MGT 325J; (B) INCO 215, 404, 448; (C) CS 120, MATH 250B, POLS 482, PSY 121, SOC 350. **Area II: Social and political systems** (Choose three courses, one from A and two from B) — (A) AAS 254, 340, 360, 370, SOC 329; (B) SOC 362, 366, POLS 409, SW 493. **Area III: Human behavior** (Choose three courses, no more than two from A or B. Do not take both SOC 210 and PSY 336) — (A) SW 380, AAS 440, 442, PSY 333, PSY 336 or SOC 210, SOC 211; (B) PSY 332, 337, SOC 361, 363, ZOOL 390. **Area IV: Organizational skills and management** (Choose three courses, no more than two from A or B) — (A) ACCT 201, HRM 420, MGT 300, POLS 412; (B) BUSL 255, MGT 428, 440, POLS 411, SOC 430.

The remaining 35-51 hours beyond the core requirement will be chosen, in consultation with a faculty advisor, on the basis of the student's educational goals and career interests. For those students without prior professional experience in criminal justice, internship and field experience programs may be arranged.

ASSOCIATE DEGREES

University College offers many programs of study leading to the associate degree for students who wish to obtain a two-year degree. The residence requirement for associate degrees is less than that for baccalaureate degrees and is detailed in the *Graduation Requirements* section of this bulletin. Application for the degree is made at the Office of Student Records at the time announced for all degree candidates and must be accompanied by a fee of \$8.00. Associate degree candidates are encouraged to participate in the annual commencement exercises with all other degree candidates.

There are four categories of associate degrees offered by Ohio University:

1. Associate in Arts/Associate in Science
2. Associate in Individualized Studies
3. Associate in Applied Business
4. Associate in Applied Science

The minimum requirement for an associate degree is the completion of 96 credits with a 2.0 accumulative average at graduation. Additional requirements for each degree follow this section.

Credit earned while enrolled in an Ohio University associate degree program will be applied toward an Ohio University baccalaureate degree program. The shift from an associate to a baccalaureate degree program may involve spending additional time in completing the four-year requirements for two reasons: (1) prerequisite courses may not have been completed and (2) technical courses will apply only as elective courses in most four-year degree programs.

If pursuing an associate degree program is intended as the first step toward a baccalaureate degree, the student should consult the Ohio University General Education requirements appropriate for his or her quarter of entry. These requirements are part of the program of study for all baccalaureate students.

Students moving into baccalaureate study from an associate degree program may need more than 96 additional hours to complete the requirements for their new major, especially if their associate degree was in a technology. The additional required work stems from the fundamental differences between technical and baccalaureate programs of study.

Information about all associate degree programs is available through either the regional campuses or University College. Students who plan to pursue an associate degree program must consult with the director of the specific program and/or with a member of the counseling staff of the regional campus or University College.

The student's academic records must be in the college responsible for the degree at the time he or she applies for and receives the associate degree (College of Arts and Sciences for mental health technology, University College for all other two-year degrees). If a student plans to apply for and receive both an associate degree and a baccalaureate degree simultaneously, the student's academic records will reside in the college responsible for the baccalaureate degree. It is the student's responsibility to ensure that he or she is enrolled in the appropriate college.

Associate Degree

After a Baccalaureate Degree

A student who has already earned a baccalaureate degree may pursue an associate in applied business degree or associate in applied science degree if the two-year degree is in a field other than that in which the baccalaureate degree was earned. It is also permissible for a student to pursue an associate in individualized studies degree after earning a baccalaureate degree depending on the rationale for doing so and the desired area of concentration. The associate in arts degree is not normally an appropriate degree objective for one who has already earned a baccalaureate degree. Requests for exceptions to this policy will be considered on an individual basis by the Associate Degree Sub-Committee.

Associate in Applied Business Degree. Available in accounting technology (Lancaster), business management technology (Chillicothe), general secretarial technology (Chillicothe and Lancaster). See details under the specific program.

Associate in Applied Science Degree. Available in aviation technology (Athens), electronics technology (Lancaster), human services technology (Chillicothe), industrial technology with a design or manufacturing emphasis (Lancaster), law enforcement technology (Chillicothe), library media technology (Lancaster), mental health technology (Athens), nursing (Zanesville), radio-television with either technology or performance production (Zanesville), and security-safety technology (Chillicothe). See details under specific programs.

Associate in Arts/Associate in Science Degrees.

Available on all campuses. Each degree requires a minimum of 96 credit hours. The A.A. degree must include 30 credits of arts *and* humanities (some credits in each area), 15 credits of social and/or behavioral sciences, and 15 credits of natural sciences and/or mathematics. The A.S. degree must include 30 credits of natural science *and* mathematics (some credits in each area), 15 credits of social and/or behavioral sciences, and 15 credits in arts and/or humanities. Students must also complete the Freshman English and Quantitative Skills components of Tier I of the University General Education requirement. The remaining 36 credits may be of the student's own choosing. Following are the three areas from which a student may select courses for the associate in arts and associate in science degrees. Students must work with student service directors on the regional campuses or University College counselors on the Athens campus to ensure the areas are fulfilled. The only exceptions to these requirements are the specific curricula required for the four areas in home economics (Athens) which currently lead to the associate in arts degree: child development, foods and nutrition, interior design, and textiles and clothing. These curricula are described below, under their specific titles.

Arts and Humanities

AAS 110, 150, 210, 211, 250, 310, 350, 355, 356
 Art
 Art History
 Classical Archaeology
 Classical Languages (Latin, Greek)
 Classical Languages in English
 Comparative Arts
 Dance
 English (except 150)
 Film
 Foreign Languages (Arabic, Chinese, French, German, Indonesian/Malaysian, Italian, Japanese, Portuguese, Russian, Spanish, Swahili)
 Foreign Literature in Translation
 HIST 121, 122, 123, 314D, 314E, 314F, 328, 329A, 329B, 329C, 330, 331, 351, 352, 353A, 353B, 354, 356A, 356B, 356C, 370, 389
 Humanities
 INCO 101, 103, 104, 215, 220, 353A, 353B, 353C, 353D
 Music
 Philosophy (except 120)
 Theater

Natural Science and Mathematics

Accounting
 Astronomy
 Botany
 Chemistry
 Computer Science, Computer Systems in Business
 ECON 380, 381, 385
 Engineering (except ET 100, 106, 134; EE 111, 150)
 GEOG 101, 301, 311, 312
 Geological Sciences
 Mathematics (except 011, 101)
 PPHL 120
 Physical Science

Physics
 POLS 482
 PSY 121, 226, 241, 312, 314
 Quantitative Methods
 SOC 350, 351
 Zoological and Biomedical Sciences

Social Science

AAS 201, 202, 220, 225, 331, 340, 360, 368, 440
 Anthropology
 BUSL 255, 370
 Economics (except 380, 381, 385)
 EDGS 201, 410, 440
 Geography (except 101, 301, 311, 312)
 History (except those courses listed in Arts and Humanities)
 HECF 160, 360, 370, 371
 INST 103, 113, 121
 INCO 105, 107, 205, 206, 210, 212, 234, 245
 JOUR 105, 311
 Linguistics
 Political Science (except 482)
 Psychology (except 121, 226, 241, 312, 314)
 Social Work
 Sociology (except 350, 351)
 TCOM 105, 170, 270
 Women's Studies

Associate in Individualized Studies Degree. Available on the Athens, Chillicothe, Lancaster, and Zanesville campuses. A student who wishes to pursue a two-year program of study in a field other than those available through one of the other associate degree options may design his or her own program of study to meet particular goals through the self-designed Associate in Individualized Studies Degree Program.

To be admitted to the program, the student must complete an application available in the University College Office or at one of the regional campuses and schedule an interview with a member of the counseling staff of the regional campus or University College. Final admission to the program is granted only upon review of the application by the Associate Degree Sub-Committee.

Although there are no specific course or academic area requirements, the application must outline the student's intended course of study and it must include a proposed area of concentration.

The student must indicate two resource (advisory) faculty and/or staff members who have been consulted in the preparation of his or her program, one of whom must be from the student's area of concentration.

To submit an application for admission to the program, the student must be a currently enrolled *regular* student. Requirements for the associate in individualized studies degree are:

1. 96 quarter credits of work
2. 2.0 accumulative grade-point average
3. No fewer than 30 credits of work to be taken after admission to the program
4. Completion of an approved area of concentration of at least 30 credits of work.
5. Completion of Tier I University General Education requirements.

Although applications may be submitted at any time during the quarter, the same deadlines established for the Bachelor of General Studies Program must be met to have current hours included as part of the 30 credits needed after admission to the Associate in Individualized Studies Degree Program.

Accounting Technology (A.A.R.)

Ohio University-Lancaster offers a two-year program for accounting technicians leading to the associate in applied business degree. Requirements for the degree include

45 hours of accounting technology career courses, 23-25 hours in related basic courses, and 28-29 hours in general education courses. This program prepares the student to enter junior accountant positions in business, industry, or government.

Freshman					
ATCH 103	..... 3	ATCH 104	..... 3	ATCH 105	..... 3
BA 101	..... 4	GST 231	..... 3	ATCH 203	..... 4
ENG 151	..... 5	ECON 101	..... 4	MATH 117	..... 4
GST 121	..... 3	PSY 101	..... 5	INCO 103	..... 4
				Elective	..... 4
	15		15		19

Sophomore					
ACCT 217	..... 4				
ATCH 106	..... 3	ATCH 204	..... 4	ATCH 206	..... 4
CS 120	..... 5	ATCH 205	..... 4	ATCH 209	..... 4
MKT 101	..... 4	BUSL 255	..... 4	GST 262	..... 4
Elective	..... 3	MGT 200	..... 4	Elective	..... 2-5
	19		16		14-17

A minimum of 96 quarter hours is required for completion.

Aviation Technology (A.A.S.)

The University College and the Aviation Department offer an associate in applied science degree in aviation technology. Completion of this program will prepare students for career opportunities in commercial aviation as F.A.A. certified pilots and air crew members as well as positions in related aerospace industries. Interested students should consult with the chairman of the Aviation Department, at the airport.

Freshman					
AVN 110	..... 4	AVN 240	..... 4	AVN 310	..... 4
IT 220	..... 3	ECON 102	..... 4	AVN 340	..... 4
MATH 113*	..... 5	GEOG 101	..... 5	GEOG 311	..... 5
ENG 151	..... 5	Elective	..... 4-5	PSC 101	..... 4-5
	17		17-18		17-18

Sophomore					
AVN 343	..... 4	AVN 400	..... 4	AVN 420	..... 4
AVN 350	..... 4	PSY 275	..... 5	AVN 440	..... 4
PSY 101	..... 5	ECON 101	..... 4	INCO 103	..... 4
INCO 101	..... 3	Elective	..... 3	Elective	..... 4
	16		16		16

A minimum of 96 quarter hours is required for completion.

*Those students needing to start with MATH 101 will take MATH 113 winter quarter of the freshman year.

Course offerings may vary from quarter to quarter; therefore the sequence may be adjusted to fulfill the requirements.

Business Management Technology (A.A.B.)

Ohio University-Chillicothe offers a two-year program of study in business management leading to the associate in applied business degree. Requirements for the degree include a minimum of 45 hours of business management technology courses, 27 hours in related basic courses, and 28 hours in general education courses. This program prepares the student to assume paraprofessional positions in business, industry, and government.

Freshman					
BMT 110	..... 4	ECON 102	..... 4	BA 101	..... 4
ECON 101	..... 4	BMT 130	..... 3	ATCH 105	..... 3
ATCH 103	..... 3	ATCH 104	..... 3	PSY 101	..... 5
ENG 151	..... 5	INCO 103	..... 4	BMT 150	..... 3
		BMT 140	..... 4	GST 269	..... 3
	16		18		18

Sophomore

BUSL 255	4	BMT 230	3	BMT 270	3
CS 120*	5	BMT 240	3	BMT 280	4
BMT 220	4	BMT 250	3	BMT 285	3
BMT 210	4	CS 220**	5	BMT 275	4
BMT 203	3	BMT 260	4	INCO 105	4
	20		18		18

A minimum of 96 hours is required for completion.

*MATH 101 or equivalent is a prerequisite for CS 120.

**MATH 113 or equivalent is a prerequisite for CS 220.

A real estate option is available through the Business Management Technology Program by substitution of the following courses:

REAL 101 Principles and Practices	4
REAL 103 Real Estate Law	4
REAL 102 Brokerage	4
REAL 201 Real Estate Appraising I	4
REAL 204 Real Estate Finance	4
REAL 221 Real Estate Seminar	4

Courses not required for the real estate option are:

BMT 150, 220, 203, 240, 250, 260, 280; GST 269; CS 220; and INCO 105.

Child Development (A.A.)

University College and the School of Home Economics offer an associate in arts degree in child development. Interested students should consult with the director of home economics for additional information, including employment opportunities and continuation into the baccalaureate degree program.

Required General Education Courses

English	5
INCO 101 Fundamentals of Speech	3
OR	
INCO 103 Pub. Spkg.	4
SOC 101 Intro. to Soc.	5
PSY 101 Gen. Psych.	5
Science or humanities	10

Technical Requirements

HECF 160 Intro. to Child Devel.	4
HECF 361 Prin. of Preschool Guid.	4
HECF 363 Creative Exper. with Young Children	4
HECF 364 Premath & Science with Young Children	4
HECF 462A-F Child Devel. & Family Life Modules (must select at least two)	4
HECF 371 Family Devel.	3
HECF 365 Infant Educ.	4
HECF 399 Jr. Pract.-Prof. Devel.	2-5
HEFN 232 Infant & Child Nutrition	4
OR	
HEFN 128 Intro. to Nutrition	4
HLTH 227 First Aid	3
EDSP 371 Tchng. the Preschool Handicapped	3
EDEL 321 Children's Lit.	4

Basic Related Requirements

MUS 262 Mus. in Early Childhood	3
HSS 108 Intro. to Speech Disorders	3
EDM 480 Intro. to Educ. Media	4
ART 360 Art for Elem. Teachers	6
SOC 327 Soc. of Educ.	4

Electives

Enough for 96 total hours.

A minimum of 96 hours is required for completion.

Electronics Technology (A.A.S.)

Ohio University-Lancaster offers a two-year program for electronics technicians leading to the associate in ap-

plied science degree. Requirements for the degree include 50-52 hours of electronics technology career courses, 25 hours of related basic courses, and 23 hours of general education courses. This program prepares the student for positions in production or service industries, assisting the engineer, or working as part of an engineering team to design, test, install, or maintain electronics and computer systems.

Freshman

ETCH 133	5	INCO 103	4	ETCH 235	6
IT 101	3	ETCH 134	5	ETCH 135	5
IT 115	4	Elective	4	PSY 101	5
MATH 117		MATH 118 or			
or 101	4	117	4	MATH 163A or	
				263A	5
	16		17		21

Sophomore

ETCH 236A	6	ETCH 234	6	ETCH 250	3
ETCH 233	6	PHYS 202	4	ETCH 200	3
PHYS 201	4	ETCH 236B	6	BA 101 or	
				ECON 101	4
				ENG 151	5
				ETCH 237	3
	16		16		18

A minimum of 96 hours is required for completion.

Foods and Nutrition (A.A.)

University College and the School of Home Economics offer an associate in arts degree in foods and nutrition. Interested students should consult with the director of home economics for additional information, including employment opportunities and continuation into the baccalaureate degree program.

Required General Education Courses

English	10
INCO 101 Fundamentals of Speech	3
OR	
INCO 103 Pub. Spkg.	4
ECON 101 Principles	4
SOC 101 Intro. to Sociology	5
PSY 101 Gen. Psych.	5

Technical Requirements

HEG 101 Professional Awareness	2
HEFN 222 Food Science & Prin.	4
HEFN 128 Intro. to Nutrition	4
HEFN 120 Meal Mgt.	3
HEFN 437 Food Service Systems I	4
HEFN 334 Quantity Food Prod.	4
HEFN 321 Creative Cookery & Food Styling	3
HEFN 423 Food Preservation	3
HECE 390 Family Consumer Econ.	3
ACCT 201 Financial	4
JOUR 250 Advert. Prin.	5
HECE 391 Equipment	4
BUSL 255 Law & Society	4

Basic Related Requirements

MGT 300 Mgt.	4
CHEM 121, 122, 123 Intro. to Chem., Chem. of Solutions, Envir. Chem.	13
MICR 211, 212 Envir. Micro. & Lab.	5

Electives

Enough for 96 total hours.

A minimum of 96 hours is required for completion.

General Secretarial Technology (A.A.B.)

The Chillicothe and Lancaster campuses of Ohio University each offers a two-year program leading to an associate in applied business degree in general secretarial technology. This program prepares the student to enter top secretarial positions in business, industry, and the professions. The program incorporates the development of managerial skills.

General Secretarial Technology (Chillicothe)

Freshman					
GST 111	3	GST 112	3	GST 113	3
GST 121	3	GST 122	3	GST 123	3
GST 131	3	GST 171G	3	GST 172G	3
ENG 151	5	Electives	4	GST 231	3
Electives	4	MGT 200	4	PSY 101	5
	18		17		17

Sophomore					
GST 241	3	GST 242	3	GST 269	3
ATCH 103	3	GST 249	3-5	GST 293	3
GST 262	4	GST 250	2	GST 299	3-5
BUSL 255	4	INCO 103	4	PSY 131	4
CS 120	5	ATCH 104	3	BA 101	4
	19		15-17		17-19

A minimum of 96 hours is required for completion.

General Secretarial Technology (Lancaster)

Freshman					
GST 151	3	GST 225	3	GST 226	3
GST 121	3	GST 122	3	GST 123	3
GST 131	3	GST 171G	3	GST 172G	3
ENG 151	5	Electives	4	GST 231	3
Electives	4	BA 101	4	PSY 101	5
	18		17		17

Sophomore					
GST 239	3	GST 221	3	GST 269	3
ATCH 103	3	GST 249	3	GST 293	2
GST 262	4	GST 250	2	GST 299	2-5
BUSL 255	4	INCO 103	4	Elective	4
CS 120	5	ATCH 104	3	BA 101	4
	19		15		15-18

A minimum of 96 hours is required for completion.

Legal Secretarial Technology (Chillicothe)

Freshman					
GST 111	3	GST 112	3	GST 113	3
GST 121	3	GST 122	4	GST 123	3
GST 131	3	GST 141L	2	GST 172L	3
ENG 151	5	GST 171L	3	GST 231	3
Electives	4	MGT 200	4	PSY 101	5
	18	Elective	3		17

Sophomore					
GST 241L	3	GST 242L	3	GST 269	3
ATCH 103	3	GST 249	3-5	GST 293	3
GST 262	4	GST 250	2	GST 299	3-5
BUSL 255	4	ATCH 104	3	BA 101	4
CS 120	5	INCO 103	4	PSY 231	5
	19		15-17		18-20

A minimum of 96 hours is required for completion.

Medical Secretarial Technology (Chillicothe)

Freshman					
GST 111	3	GST 112	3	GST 113	3
GST 121	3	GST 122	3	GST 123	3
GST 131	3	GST 141M	2	GST 172M	3
ENG 151	5	GST 171M	3	GST 231	3
Electives	4	MGT 200	4	PSY 101	5
	18	Elective	3		17

Sophomore					
GST 241M	3	GST 242M	3	GST 269	3
ATCH 103	3	GST 249	3-5	GST 293	3
GST 262	4	GST 250	2	GST 299	3-5
BUSL 255	4	ATCH 104	3	BA 101	4
CS 120	5	INCO 103	4	PSY 231	4
	19		15-17		17-19

A minimum of 96 hours is required for completion.

Human Services Technology (A.A.S.)

Ohio University-Chillicothe offers a two-year program leading to an associate in applied science degree in human services technology. The program prepares students for employment in agencies and institutions such as mental hospitals and clinics, correctional facilities, drug abuse programs, social services, and others providing human services. Students interested in admission to the program should contact the human services technology office at the Chillicothe campus.

Freshman					
HST 102	3	HST 101	5	HST 125	4
HST 110	3	ENG 151	5	HST 150	3
PSY 101	5	HST 290	3-4	HST 170	4
SOC 101	5	POLS 306	4	PSY 332	4
	16		17-18		15

Sophomore					
HST 151	4	HST 152	4	HST 200	3
HST 171	3	HST 220	2	HST 250	2
HST 210	2	HST 222	1	HST 255	1
HST 211	1	PSY 333 or		Electives	3-4
HST 275	3	273	4	Soc Sci Elect	4-5
HST 290	3-4	ZOOL 101 or		ZOOL 382	3
	16-17	103	5		16-18

A minimum of 96 hours is required for completion.

Industrial Technology (A.A.S.)

Ohio University-Lancaster offers a two-year program for industrial technicians leading to the associate in applied science degree. Students may choose an area of specialization by selecting either the design or manufacturing option. A total of 73-75 hours of courses is common to both options.

The design option, requiring an additional 29 hours, prepares the student for various design-related positions, such as a design technician, product design, engineering support, or technical sales.

The manufacturing option requires an additional 23-25 hours and students are prepared for positions in production industries that may include technician, quality-control specialist, process control specialist, maintenance supervisor, foreman, and supervisor.

Graduates may also choose to finish the four-year industrial technology degree in Athens.

Descriptions of the design technology (DTCH) and manufacturing technology (MTCH) courses are found at the end of the industrial technology course descriptions.

Design Option

Freshman

MATH 117	4	MATH 118	4	MATH 163A	4
CHEM 121	4	CHEM 122	4	IT 121	3
IT 101	3	IT 102	3	DTCH 150	3
IT 115	4	IT 216	4	PHYS 201	4
		INCO 103	4	MTCH 290	3
	15		19		17

Sophomore

DTCH 200	4	DTCH 210	4	DTCH 220	3
MTCH 220	3	DTCH 230	4	DTCH 250	4
ETCH 133	5	DTCH 240	4	PSY 101	5
PHYS 202	4	ENG 151	5	Hum./Soc.	
Tech. El.	3			Sci. Elec.	3-5
	19		17		15-17

A minimum of 96 hours is required for completion.

Manufacturing Option

Freshman

MATH 117	4	MATH 118	4	MATH 163A	4
CHEM 121	4	CHEM 122	4	IT 102	3
IT 101	3	IT 216	4	MTCH 261	3
IT 115	4	ENG 151	5	PHYS 201	4
	15		17	MTCH 290	3
					17

Sophomore

IT 260	3	MTCH 263	3	MTCH 264	3
MTCH 220	3	MTCH 221	3	BA 101	4
ETCH 133	5	MTCH 299	1-3	PSY 101	5
PHYS 202	4	INCO 103	4	Tech. elec.	3
MTCH 262	3	Hum./soc.			
		sci. elec.	3-5		
	18		14-18		15

A minimum of 96 hours is required for completion.

Interior Design (A.A.)

University College and the School of Home Economics offer an associate in arts degree in interior design. Interested students should consult with the director of home economics for additional information, including employment opportunities and continuation into the baccalaureate degree program.

Required General Education Courses

English	10
INCO 103 Pub. Spkng.	4
SOC 101 Intro. to Soc.	5
PSY 101 Gen. Psych.	5
ECON 101 Prin.	4

Technical Requirements

HEID 180 Furnishing Today's Home	3
HEID 384 Family Housing	3
HEID 385 Home Furnishings Wkshp.	4
HEID 480 Hist. of Furniture	3
HEID 481 Contemp Design in Furnishings	3
HEID 482 Design in Home Accessories	3
HEID 299 Soph. Practi.-Prof. Assessment	2
HEID 280, 281, 282, Interior Design Studio I, II, III	15
IT 104, 105 Architectural Drawing	10

Basic Related Requirements

HETC 315 Elem. Textiles	4
ART 101 2-Dimensional Design	4
MGT 300 Management	4
CS 120 Comput. Science Survey	5
ACCT 201 Financial	4
HETC 318 Fashion Merchandising: Promotion	4
HETC 417 Fashion Merchandising: Mgt.	3

Electives

Enough for 96 total hours.

A minimum of 96 hours is required for completion.

Law Enforcement Technology (A.A.S.)

Ohio University-Chillicothe offers a two-year program leading to an associate in applied science degree in law enforcement technology. This program prepares the student for employment in law enforcement by providing academic preparation for the contemporary officer. Career opportunities may be available in areas such as state highway patrol, local and county law enforcement agencies, corrections, juvenile authorities, and as probation officers. Upon completion of this program, interested students may continue in the Bachelor of Criminal Justice Program on the Athens campus. Students may also work toward the Athens-based four-year degree in forensic chemistry. Additional information is available from the Law Enforcement Technology Program director or the director of the Criminal Justice Program.

Freshman

LET 100	3	LET 120	3	LET 140	3
LET 110	3	LET 130	3	LET 150	3
ENG 151	5	HLTH 227	3	HSC 132	1
HSC 107	1	HSC 113	1	PSY 101	5
SOC 101	5	INCO 101	3	SOC 201	4
		POLS 102	4		
	17		17		16

Sophomore

LET 200	3	LET 230	3	LET 260	3
LET 210	3	LET 240	3	LET 270	3
LET 220	3	LET 250	3	LET 280	3
ART 191	4	SOC 362	4	POLS 320	5
HSM 104	1	EDGS 410	3	HSM 107	1
		HSM 105	1		
	14		17		15

A minimum of 96 hours is required for completion.

Library and Information Technology (A.A.S.)

Ohio University-Lancaster offers a two-year program in library and information science leading to an associate in applied science degree. This program prepares the student for employment as supportive staff in libraries between the professional librarian and the library clerk. Career opportunities may be available in elementary and secondary school libraries, public and academic libraries, business and industry, or government agencies.

Freshman

LMTC 101	3	LMTC 102	4	LMTC 103	4
INCO 103	4	LMTC 201	4	LMTC 104	4
PSY 101	5	ENG 151 or		SOC 101	5
ART 151 or		151T	5	MATH 117 or	
191	4	GST 121	3	120	4-5
	16		16		17-18

Sophomore

LMTC 204	5	LMTC 210	4	LMTC 205	3
LMTC 206	4	LMTC 207	4	LMTC 209	1
General elective ..	4	General elective ..	4	MGT 200, GST 269,	
Major elective ...	3	Major elective ...	4	or EDM 489 ...	3-5
				General elective ..	3
				Major elective ...	4
	16		16		14-16

A minimum of 96 hours is required for completion.

Mental Health Technology (A.A.S.)

The College of Arts and Sciences through the Department of Social Work offers the associate in applied science degree in mental health technology. (See Special Curricula in the *College of Arts and Sciences* section in this bulletin.)

Nursing (A.A.S.)

Ohio University-Zanesville offers a two-year nursing program. A student who completes the program will receive an associate in applied science degree in nursing and will be eligible to write the State Board Examination for Registered Nurse. The program is accredited by the National League for Nursing, and is open to men and women. All nursing courses (labeled NURS) must be completed with a grade of C or better.

Freshman*

NURS 101	5	NURS 102	5	NURS 103	6
CHEM 121	4	CHEM 123	4	PSY 101	5
ZOOL 101	5	ZOOL 300	6	MICR 310	4
INCO 101	3			ZOOL 345	4
	17		15		19

Before taking NURS 104, students must have an accumulative g.p.a. of 2.0 or better in the above courses.

NURS 104.....6 Cr., to be taken during 1st summer session between 1st and 2nd years.

ENG 151 must be taken by the end of the summer quarter of the sophomore year of study.

Sophomore*

NURS 201.....	6	NURS 203.....	6	NURS 205A	7
NURS 202.....	6	NURS 204.....	6	NURS 205B	3
PSY 273.....	4	SOC 101	5	Elective	2
NURS 206A	1	NURS 206B	1	NURS 206C	1
	17		18		13

*The sequence of the above courses may not be altered without permission. A minimum of 110 hours is required for completion.

Radio-Television (A.A.S.)

Ohio University-Zanesville offers a two-year program leading to an associate in applied science degree in either radio-television technology or radio-television performance-production. The two-year program with a technology emphasis prepares the student to take the examination for an SBE or General Class FCC engineering license. The entire program is coordinated with learning experiences at the campus radio station WOUZ and area radio, cable, and television facilities.

Students must complete four to six hours of RTV 290 and three quarters of RTV 214 or RTV 217. They may select RTV courses other than those within their specified emphasis to fulfill only unspecified elective hours. Majors must complete no less than 40 hours of RTV credit and no more than 48 hours. All majors must maintain a 2.5 grade-point average in all RTV related courses, and a 2.0 overall average each quarter. Students failing to do so will be placed on probation and given one quarter to raise their point average to an acceptable level. Students who remain

on probation more than one quarter will be dropped from the program for a period of one year.

Suggested Radio-Television Sequence

Freshman

RTV 122*	4	TCOM 106	4	RTV 290	1
RTV 211	4	RTV 290	1	RTV 209*	2
ENG 150, 151,		English elective..	5	RTV 216	4
152, or 153....	4-5	RTV 209*	2	JOUR 351J	5
RTV 209*	2	TCOM 200A	4	CS 120	5
MATH 113*, or					
higher elective..	5				
INCO 103	4				

Sophomore

TCOM 208**	5	RTV 290	1	RTV 209*	2
RTV 290	1	RTV 209*	2	TCOM 270	4
RTV 209*	2	RTV 214 or 217..	2	RTV 214 or 217..	2
RTV 214 or 217..	2	RTV 257**	4	Arts & Science	
JOUR 353**	2	POLS 101	4	elective	4
MGT 200	4	SOC 101	5	Soc. sci.	
				elective	4
				Elective	3

*Courses recommended for technology emphasis.

**Courses not recommended for performance-production emphasis.

Suggested Electives: PSC 101L; PHYS 201, 202, 203; ECON 101; ENG 201, 202, 308J; PHIL 101, 120, 130; HIST 213, 498A; INCO 205, 404; others as approved by advisor.

Courses need not necessarily be taken in the order listed above with approval of advisor.

Majors must complete no less than 40 hours of RTV credit and no more than 48 hours.

A minimum of 96 hours is required for completion.

Security/Safety Technology (A.A.S.)

Ohio University-Chillicothe offers a two-year degree program leading to an associate in applied science degree in security/safety technology. This program prepares the students for employment in security by providing academic preparation for the contemporary officer. Career opportunities may be available in areas such as corporate, industrial, retail, and government security.

The Security/Safety Technology Program is designed for in-service security officers and preservice men and women interested in careers in security. The goal of this program is to further their knowledge of security so they are better prepared to obtain employment in this area and to help them qualify for promotion.

The security industry is currently one of the fastest growing industries in America. Security officers are now employed (and more will be employed in the future) by resorts, hospitals, airlines, government, retail companies, manufacturers, bus lines, trucking companies, housing authorities, colleges, public school systems, banks, and other industries.

Freshman

SST 101	3	LET 120	3	SST 120	3
SOC 101	5	INCO 101	3	EDGS 410	3
ENG 151	5	POLS 101	4	LET 260	3
HLTH 227	3	LET 130	3	PSY 101	5
SST 110	3	SOC 362	4	SST 290	3-4
	19		17		17-18

Sophomore

LET 200	3	ATCH 104	3	SST 230	3
ATCH 103	3	SST 210	3	SST 240	3
BUSL 255	4	BA 101	4	SST 250	3
SST 201	3	SST 220	3	SST 260	3
		CS 120	5	POLS 102	4
	13		18		16

A minimum of 96 hours is required for completion.

Textiles and Clothing (A.A.)

University College and the School of Home Economics offer an associate in arts degree in textiles and clothing. Interested students should consult with the director of home economics for additional information, including employment opportunities and continuation into the baccalaureate degree program.

Required General Education Courses

English	5
PSY 101 Gen. Psych.	5
SOC 101 Intro. to Soc.	5
INCO 103 Pub. Spkng.	4
CHEM 121	4
OR	
PSC 101L	5
Physical Science	5

Technical Requirements

HECE 390 Family Consumer Econ.	4
HEG 101 Prof. Awareness	2
HETC 299 Soph. Pract.	3
HETC 213 Design Analys.: Theory & Princ.	5
HETC 315 Elem. Textiles	4
HETC 117 Textiles & Dress & Envir.	3
HETC 313 Design Analys. Experimental	4
HETC 407 Fashion Industries	4
HETC 318 Fashion Merchandising: Promotion	4
ART 101, 102, 2- and 3-Dimensional Design	8
Select 3 from the following:	
HECF 371 Family Devel.	3
HEID 180 Furnishing Today's Home	3
HECE 390 Consumer Econ.	3
HEFN 325 Food & the Consumer	3

Basic Related Requirements

JOUR 250 Adver. Prin.	5
ACCT 201 Financial	4
MKT 301 Mkt. Prin.	4
CS 120 Comput. Science Survey	5
ECON 101 Prin.	4

Electives

Enough for 96 total hours.

A minimum of 96 hours is required for completion.

RESERVE OFFICERS TRAINING CORPS

The rationale for reserve officer training stems from a statement by the founding fathers of this nation that we must "provide for the common defense." For young men and women who have the desire and talent to dedicate their time to the service of their country, there are many and varied rewards. Today, when science and technology are so much a part of the national defense, and the defense of this nation is so inextricably involved with world problems, our nation needs talented and well-trained officers in its military services. These services need the best managers, administrators, engineers, and scientists the nation's schools can produce: officers in command with wide ranges of knowledge and skill. The Reserve Officers Training Corps, in agreement with universities and colleges, is designed to produce these types of men and women for the nation.

The Air Force ROTC program at Ohio University is under the Aerospace Studies Department; the Army ROTC program is under the Military Science Program.

ROTC is divided into two phases: the basic course and the advanced course. The University offers a four-year program and a two-year program.

Basic Course Requirements. In general, any physically qualified student who is a U.S. citizen is eligible for enrollment in the basic course.

Advance Course Requirements. To be eligible for the advanced course a student must meet academic, physical, aptitude, and moral selection criteria, complete either the basic course on campus or the six-week summer camp/field training following the sophomore year, and enlist in the reserve of the appropriate service. Active duty commissions are not guaranteed upon successful completion of the program and students may be discharged from the reserve for reasons of academic failure, personal hardship, medical disqualification, or inaptitude.

Scholarships. Four-, three-, and two-year scholarships are available on a competitive basis for all qualified students participating in the program. These scholarships pay costs of tuition, fees, books, and laboratory expenses. In addition, recipients receive a subsistence allowance at the rate of \$100 per month for the period the scholarship is in effect.

Subsistence Allowance. All students in the advanced course receive subsistence allowances of \$100 per month.

Summer Camp/Field Training Allowances. All travel expenses, board, living quarters, and uniforms are furnished and students are paid while attending summer camp/field training.

Uniforms and Equipment. Textbooks, training equipment, and complete uniforms are loaned to all ROTC students without cost.

Commissions. A student who successfully completes the ROTC advanced course and the requirements for a baccalaureate degree will be qualified for the tender of a commission as a second lieutenant in the United States Army or the United States Air Force.

Special Schooling. The ROTC program encourages graduate study and may delay a call to active duty for up to four years for students enrolled in graduate-level study. Selected officers, after entrance on active duty, are sent to civilian universities or service technical institutes for graduate work leading to a master's degree or to a doctor's degree in specialized fields.

Aerospace Studies Program (Air Force ROTC)

The Aerospace Studies Program is designed to develop the attitudes and skills required of professional Air Force officers. Emphasis is on professional education. The basic goal is to provide to student cadets the background knowledge to become junior officers in the United States Air Force, while acquiring baccalaureate degrees in fields of their own choosing.

The curriculum during the first two years of the basic "General Military Course" (one credit hour per quarter) focuses on the doctrine, mission, and organization of the United States Air Force. It also includes studies of the development of air power and present concepts within the Air Force. Included within this framework are elements of national power, an overview of the Air Force, a study of democracy, and the actions of nations in their search for world peace. Concurrently with these academic subjects the student cadet will participate in leadership activities called "Leadership Lab." These will enable him or her to gain an insight into dynamics of military leadership as well as to become familiar with the customs and courtesies of the military way of life. There is no service commitment during the first two years and it is an excellent way for a student to look at the Air Force as a career. The entire

basic unit consists of six quarters of study and is entitled General Military Course or GMC.

The advanced curriculum, appropriately named the "Professional Officer Course" or POC, is specifically designed to prepare the student cadet for active duty as a commissioned officer. The course curriculum in the senior year includes study of defense policy making, the military and professional soldier, strategy and arms control. It emphasizes professional responsibilities of Air Force officers within our democratic society and how the Air Force supports national goals. Studies are made of the military leadership and principles of management during the junior year. Through classroom methods of case studies, guest lecturers, and dialogue, the student cadet experiences a realistic simulation of problems facing the junior officers. The members of the advanced Professional Officer Course develop their leadership skills by working with the freshman and sophomore cadets; they improve their communicative abilities by writing and speaking; and they perform organizational projects similar to those accomplished by active duty Air Force officers. This advanced unit consists of six quarters (three credit hours per quarter) of on-campus study and a summer quarter of field training which is a prerequisite of the course.

Qualified cadets have the additional option of becoming flying officers. Identification for either pilot or navigator training will be made prior to the beginning of the advanced (POC) course. Cadets qualified in the pilot category will receive 13 hours of flight instruction and screening to qualify them for entry into USAF flight training after graduation. This on-campus instruction will be provided at no cost to the student cadet as part of the Air Force ROTC program. Navigator qualified cadets receive no formal flight instruction until after graduation and commissioning when they will enter the USAF's Navigation Flying Training Program.

After commissioning, each new officer will be assigned to a position within the Air Force structure which best combines his or her academic major and desires with the needs of the Air Force. Past graduates have requested and been assigned to areas of air operations (both flyers and nonflyers); administration; biological, medical, physical, and social sciences; engineering; law; and research and development in aerospace technologies.

Military Science Program (Army ROTC)

The military science program is designed to develop the leadership and management skills required of an officer in the United States Army. The military science curriculum complements the student's normal coursework for a baccalaureate degree and provides a basis for progression towards a commission as an officer in the United States Army. There are two programs available to the student: the traditional four-year program which parallels the normal college program, and the two-year program which

permits a student to enter prior to the last two years of college.

During the first two years or basic course, the student takes classes (two credit hours per quarter) in general military subjects including an introduction to the Army ROTC program, leadership, land navigation, survival training, and military campaign studies. These courses provide the student with a basic understanding of the military system, and a background for the second two years of the program. During the first two years there is no requirement for wearing of uniforms, and no military service obligation incurred. Students may be given credit for the basic course in several ways, which qualifies them for continuation in the ROTC program. Students having prior military service, credit for other officer training courses, or currently serving in the National Guard or Reserves may receive credit for the basic course. Additionally, students may attend a six-week ROTC Basic Camp during the summer between their sophomore and junior years in lieu of the basic course. Attendance at camp is voluntary and incurs no military service.

The second two years or advanced course expands the student's knowledge of military subjects including military justice, tactics, ethics and professionalism, management, training, and current issues affecting the military. In addition to the credit courses, the department conducts a leadership laboratory in which all advanced students take part in planning and conducting adventure-type outdoor training activities. Examples of such activities are rappelling, survival swimming, marksmanship, physical training, backpacking, and land navigation. Advanced course students are required to attend a six-week summer camp between their junior and senior years. All summer camp expenses are paid by the Army including meals, housing, travel, and uniforms. In addition, each cadet is paid approximately \$600 in military pay for camp attendance (this applies to both basic and advanced camps).

The military science department also sponsors several extracurricular clubs or activity groups, organized by the cadets with faculty advisors, such as Pershing Rifles drill team, orienteering, Rangers, color guard, and rifle team. Cadets may be selected on a voluntary basis for attendance at U.S. Army schools such as Airborne (parachutist) School, Air Assault School, Northern Warfare School, and Ranger School.

During the advanced course the student enters into a contract which obligates him or her to complete the program, accept a commission as an officer, and serve in the U.S. Army, U.S. Army Reserves, or Army National Guard. Upon graduation and commissioning, lieutenants have a variety of assignments and locations (Europe, Far East, and U.S.) in which to complete their military service obligation. Past graduates have been assigned duties in the fields of aviation, material management, communications, administration, and engineering among many other professional fields in the modern Army.

Courses of Instruction



Courses of Instruction

CATALOG NUMBERS — The catalog number indicates the student classification for which the course is primarily intended:

- 001-099 Noncredit courses
- 100-299 Undergraduate general program
- 300-499 Undergraduate advanced or specialized program

Within the College of Arts and Sciences the alphabetical catalog-number suffixes -I and -O generally are not used. Other alphabetical suffixes have specific meanings: -H, honors courses; -J, junior-level composition courses; -T, tutorial courses; -X, study abroad courses.

CREDIT — Credit for a course is indicated by the number or numbers in parentheses following the course title. It may be expressed thus: (3), (1-3), or (2 or 3).

A course with one quarter hour of credit (1) is the equivalent of one recitation or two or more laboratory periods a week throughout a quarter.

In a course carrying variable credit, the credit may be expressed (1-4, max 8), indicating that one hour is the minimum and four hours is the maximum amount of credit allowed for the course in one quarter. However, a student may enroll in the course any number of times and for any number of credit hours, within the quarter limit, provided the total registration for the course does not exceed eight hours.

Courses which satisfy one of the University General Education requirements are indicated by a notation on the title line as follows: Tier I courses are marked either (1E) for English composition or (1M) for quantitative skills; Tier II designations are (2A) applied science and technology, (2H) humanities and fine arts, (2N) natural sciences and mathematics, (2S) social sciences, and (2T) Third World cultures; and Tier III courses are marked (3S) for interdisciplinary synthesis.

Course prerequisites are indicated at the beginning of the course description, following the abbreviation "Pre-req." A student who has any doubts if he or she has fulfilled prerequisites, due to changes in the numbering system over the past several years, should check the course titles and consult with his or her advisor and the office of the dean. A student who completes an advanced course may not subsequently enroll in a prerequisite course for credit.

If a course is offered for other than the normal academic year of fall, winter, and spring quarters, this fact is noted in parentheses after the prerequisite. Such courses are offered only in the quarters specified.

INSTRUCTORS — Unless otherwise indicated in italics following the quarter specification in the course description, the course may be taught by any member of the staff of the department. This course listing is verified as of May, 1984.

FEE — When a course requires a private instructional fee, the amount is stated in the course description.

SCHEDULE — A Schedule of Classes is available each quarter from the Office of Registration.

COURSES OF INSTRUCTION are available in the following areas of study (course codes are in parentheses):

- Accounting (ACCT)
- Accounting Technology (ATCH)
- Aerospace Studies (AST)
- Afro-American Studies (AAS)
- Anthropology (ANTH)
- Art (ART)
- Art History (AH)
- Aviation (AVN)
- Botany (BOT)
- Business Administration (BA)
- Business Law (BUSL)
- Business Management Technology (BMT)
- Chemistry (CHEM)
- Communication Management (COMT)
- Comparative Arts (CA)
- Computer Science (CS)
- Computer Systems in Business (CSB)
- Dance (DANC)
- Economics (ECON)
- Education
 - Curriculum and Instruction (EDCI)
 - Economic Education (ECED)
 - Educational Administration (EDAD)
 - Educational Media (EDM)
 - Elementary Education (EDEL)
 - Guidance and Counseling (EDGS)
 - International and Comparative Education (EDIC)
 - Professional Laboratory Experience (EDPL)
 - Secondary Education (EDSE)
 - Special Education (EDSP)
- Electronics Technology (ETCH)
- Engineering, Chemical (CHE)
- Engineering, Civil (CE)
- Engineering, Electrical and Computer (EE)
- Engineering, Industrial and Systems (ISE)
- Engineering, Mechanical (ME)
- Engineering and Technology (ET)
- English
 - English Language and Literature (ENG)
 - Humanities (HUM)
- Film (FILM)
- Finance (FIN)
- Foreign Languages and Literatures
 - African and Asian Literatures in English
 - Arabic (ARAB)
 - Chinese (CHIN)
 - Classical Archaeology (CLAR)
 - Classical Languages in English (CLNG)
 - French (FR)
 - Foreign Literatures in English (FLT)
 - German (GER)
 - Greek (GK)
 - Indonesian/Malaysian (INDO)
 - Italian (ITAL)
 - Japanese (JAPN)

Latin (LAT)
 Modern Languages (ML)
 Portuguese (PORT)
 Russian (RUS)
 Southeast Asian Literatures in Translation (SLT)
 Spanish (SPAN)
 Swahili (SWAH)

Geography (GEOG)

Geological Sciences (GEOL)

Health and Sport Sciences

Athletic Training (HSAT)
 Coeducational Activities (HSC)
 Health Sciences (HLTH)
 Men's Activities (HSM)
 Physical Education and Sport Sciences (HPES)
 Recreation Studies (HREC)
 Women's Activities (HSW)

Hearing and Speech Sciences (HSS)

History (HIST)

Home Economics

Child Development and Family Life (HECF)
 Consumer Education (HECE)
 General Home Economics (HEG)
 Food and Nutrition (HEFN)
 Interior Design (HEID)
 Textiles and Clothing (HETC)

Human Resource Management (HRM)

Human Services Technology (HST)

Industrial Hygiene (IH)

Industrial Technology (IT)

A.A.S.-Design (DTCH)
 A.A.S.-Manufacturing (MTCH)

International Studies (INST)

Interpersonal Communication (INCO)

Journalism (JOUR)

Law Enforcement Technology (LET)

Library and Information Technology (LMTC)

Linguistics (LING)

Management (MGT)

Marketing (MKT)

Mathematics (MATH)

Mental Health Technology (MHT)

Military Science (MSC)

Music (MUS)

Applied Music
 Music Education
 Music History and Literature
 Independent Studies in Music
 Music Theory and Composition
 Music Therapy

Nursing

Associate Degree Program (NURS)
 Baccalaureate Program (NBSP)

Ohio Program of Intensive English (OPIE)

Philosophy (PHIL)

Physical Therapy (PT)

Physics and Astronomy

Astronomy (ASTR)
 Physical Science (PSC)
 Physics (PHYS)

Political Science (POLS)

Psychology (PSY)

Quantitative Business Analysis (QBA)

Radio-Television (RTV)

Real Estate Technology (REAL)

Secretarial Technology, General (GST)

Security/Safety Technology (SST)

Social Work (SW)

Sociology (SOC)

Telecommunications (TCOM)

Theater Arts (THAR)

University College (UC)

University Professor (UP)

Visual Communication (VICO)

Women's Studies (WS)

Zoological and Biomedical Sciences

Microbiology (MICR)

Zoology (ZOO)

ACCOUNTING

The accounting major is designed to equip the student to enter the profession of accountancy at the beginning level in public or industrial accounting or in governmental or nonprofit institutions.

In addition to the B.B.A. degree requirements, a student majoring in accounting must complete ACCT 203, 217, 304, 305, 310, 317, 345, and 451. The major requirement also includes BUSL 357. Note that ACCT 304 (intermediate) has a prerequisite of permission of the department. Furthermore, the Accounting Department has a priority registration system and students who have previously taken a course or registered for a course and subsequently dropped it will have a lower priority in the next subsequent quarter than a student who has not yet attempted the course.

201 Financial Accounting (4)

Prereq: Tier I English, MATH 163A, MATH 250B, and ECON 102. (fall, winter, spring, summer) Introduction to accounting principles and practices and data accumulation.

202 Managerial Accounting (4)

Prereq: 201. (fall, winter, spring, summer) Uses of accounting information for making managerial decisions.

203 Accounting Information Systems (4)

Prereq: 202. (winter, spring, summer) Fundamental accounting principles and practices emphasizing data accumulation using accounting techniques. Primarily intended for those specializing in accounting. Required for accounting major.

217 Introduction to Taxation (4)

(fall, winter, summer) Introduction to process of taxation with emphasis on broad provisions of federal income tax as it applies to individuals. (Prereq for ACCT 317.) Required for accounting major.

304 Intermediate Accounting (4)

Prereq: 203, 217, 310, and perm. Avg 2.5 g.p.a. in ACCT usually means acceptance. Preparation and analysis of accounting statements; special problems in accounting for current, fixed, and intangible assets, for liabilities and for corporate net worth; funds and reserves; and investments. Required for accounting major.

305 Intermediate Accounting (4)

Prereq: 304, jr rank. (winter, spring) Continuation of 304. See 304 for description. Required for accounting major.

310 Cost Accounting (4)

Prereq: 202, QBA 201, jr rank. (fall, spring, summer) Manufacturing cost determination under job-order and process systems. Establishment of standard costs, budgets, and analysis of variances. Required for accounting major.

311 Industrial Accounting (4)

Prereq: 201, 202, jr rank. Primarily for nonaccounting majors. Objective to explain how accounting data can be interpreted and applied by management in planning and controlling business activities. Major purpose to show how accounting data can help solve problems confronting management. Attention also given to use of accounting data by investors, potential investors, and lenders. Concentration on use of data rather than collection and presentation.

312 Accounting for Health Care Organizations (4)

Prereq: 201 and 202, jr rank. Introduces student to use of accounting data in planning and controlling health care organizations. Basic cost accounting theory and applications stressed as aids to fee setting, budgeting, asset acquisition functions.

317 Federal Income Taxes (4)

Prereq: 201 and 217, jr rank. (winter, spring, summer) Continuation of 217 with emphasis on details of federal income tax as it applies to individuals and special provisions which apply to corporations. Required for accounting major.

340 Advanced Cost Accounting (4)

Prereq: 310, jr rank. (spring) Analysis of relevant costs for decision-making including nonmanufacturing costs. Current cost accounting topics.

345 Accounting Systems and Internal Control (4)

Prereq: 203, 217, and 310, jr rank, or perm to CSB majors. (winter, spring) Systems approach to data collection, classification, and dissemination. Required for major in accounting.

347 Tax Research (4)

Prereq: 317, jr rank. (fall) Advanced tax problems of individuals, partnerships, and corporations with emphasis on tax research and research methodology.

406 Advanced Accounting (4)

Prereq: 305. (fall) Problems peculiar to partnerships, receiverships, fiduciaries, installment sales, consignments, insurance, estates and trusts; compound interest applications; governmental accounting; branches, consolidations, and mergers and foreign exchange.

407 Advanced Accounting (4)

Prereq: 305. (winter) Seminar in current topics.

451 Auditing Principles (4)

Prereq: 305 and 345. (fall, spring) Purposes and scope of audits and examinations; audit principles and procedures; audit reports and certificates. Required for accounting major.

452 Advanced Auditing (4)

Prereq: 451. (winter) Auditing theory and practice with emphasis on professional standards, ethics, audit programs, audit procedures, and reporting requirements.

457 Advanced Tax (4)

Prereq: 317 or perm. (spring) Tax aspects of corporate organizations, distributions; reorganizations and liquidations; partnership taxation; Sub S corporations.

491 Seminar (3, 4, or 5)

Prereq: perm. Selected topics of current interest in accounting area.

497 Independent Research (1-15)

Prereq: perm. Research in selected fields of accounting under direction of faculty member.

498 Internship (1-4)

Prereq: perm. (fall, winter, spring, summer)

ACCOUNTING TECHNOLOGY

The following courses for the A.A.B. program in accounting technology are available only on the Lancaster campus.

103 Financial Accounting Procedures (3)

(fall) Application of fundamental principles to personal service enterprise and mercantile enterprise, with illustrations of double-entry mechanism; procedures of journalizing and posting; accounting for cash, merchandise, notes and interest, revenue and expense; financial statement preparation, including adjusting and closing procedures.

104 Financial Accounting Procedures (3)

Prereq: 103, MATH 117. (winter) Consideration of accounting procedures for purchases, sales (including installment and consignment sale), inventory, prepaid expenses, tangible long-lived assets; accounting procedures for owners' equity in single proprietorship, partnership, and corporation; year-end worksheet procedure; annual report including income statement, balance sheet, and statement of changes in financial position; interim statements.

105 Financial Accounting Procedures (3)

Prereq: 104. (spring) Consideration of accounting procedures for corporate form of organization including organization and management, corporate records, capital stock transactions, corporate earnings, corporate bonds; accounting procedures for investments and long-lived intangible assets, branch operations, voucher systems, manufacturing businesses, financial statement analysis.

106 Financial Accounting Procedures (3)

Prereq: 104, 105. (spring) Data collection procedure, working paper procedure, and financial statement procedure for service enterprise, mercantile enterprise, and manufacturing enterprises.

203 Tax and Governmental Reporting Procedures (4)

Prereq: 104. (fall) Consideration of data sources, forms, and filing requirements for payroll taxes, income taxes, withholding taxes, FICA, sales taxes, unemployment reports, and wide variety of other specialized local, state, and federally required reports and procedures.

204 Electronic Data Processing Accounting Procedures (4)

Prereq: 106. Consideration of impact of computer and other electronic data processing devices on accounting procedures, including use of specialized machines and programs.

205 Manufacturing Accounting I (4)

Prereq: 106. (winter) Data collection procedures for manufacturing firms for actual, normal, and standard job order cost accounting systems, including methodology and data requirements for determination of standards.

206 Manufacturing Accounting II (4)

Prereq: 205. (spring) Data collection procedures and reports for manufacturing firms for actual, normal, and standard process cost accounting systems including methodology of allocation of service department costs.

209 Business Statistics (4)

Prereq: MATH 117. Basic statistics, demonstrated and developed through problems typical of actual business situations. Procedures and applications of statistical analysis and inference as they relate to business activity.

299 Independent Study (1-5)

Prereq: perm of instructor. Supervised independent study projects in accounting technology.

AEROSPACE STUDIES

The Department of Aerospace Studies offers two programs, either of which leads to a commission as a second lieutenant in the United States Air Force.* The four-year program is designed for students who can begin Air Force ROTC with the fall quarter of their freshman year and complete aerospace studies requirements by their date of graduation. Students taking the four-year program begin by enrolling in AST 100. Out-of-sequence courses can be scheduled by arrangement with the Department of Aerospace Studies.

The two-year program is designed for students unable to take Air Force ROTC during their first two years of college. It is similar to the last two years of the four-year program. Students interested in this program will not schedule Air Force ROTC during their first two years; however, they should consult the chairman of aerospace studies during their freshman year (or, in any event, not later than fall quarter of the sophomore year) for instructions regarding application of this program.

Entry into the Professional Officer Course (AST 300 and 400 series) is based upon a best-qualified selection process. Completion of the General Military Course (AST 100 and 200 series) does not guarantee entry into the Professional Officer Course (POC), but makes one eligible to compete for acceptance into the POC. After achieving commissioned status, the officer serves a minimum of four years active duty with the United States Air Force. For further information contact the Chairman of Aerospace Studies, Lindley Hall.

*Students enrolled in either program may compete for scholarships which pay full tuition, books, lab fees, and a tax-free monthly allowance.

101 Strategic Offensive Forces (1)

(fall) Doctrine, mission, and organization of United States Air Force and U.S. strategic offensive forces. 1 hr of academics and 1 hr of leadership lab each wk.

102 Strategic Defensive Forces (1)

(winter) U.S. defensive forces, their mission, function, and employment of nuclear weapons, civil defense, and aerospace defense. 1 hr of academics and 1 hr of leadership lab each wk.

103 U.S. General Purpose Forces (1)

(spring) U.S. general purpose and aerospace support forces, mission, resources, and operation of Tactical Air Forces, with special attention given to review of Army, Navy, and Marine general purpose forces. 1 hr of academics and 1 hr of leadership lab each wk.

201 Development of Airpower (1)

(fall) History and development of airpower in U.S. 1 hr of academics and 1 hr of leadership lab each wk.

202 Contemporary Aerospace Power (1)

(winter) Covers Air Force concepts, doctrine, and employment; how technology has affected growth and development of air power. 1 hr of academics and 1 hr of leadership lab each wk.

203 Current and Future Employment of Aerospace Forces (1)

(spring) Changing mission of defense establishment; how air power is employed in military, nonmilitary, and strategic operations. 1 hr of academics and 1 hr of leadership lab each wk.

301 Management — Concepts and Practices I (3)

Prereq: GMC or perm. (fall) Human relations, personnel policies; junior officer administrative and staff responsibility; briefing for commissioned service. Continued leadership demonstration and practice. Continued development of communicative skills.

302 Military Professionalism and Leadership Theory (3)

Prereq: 301 or perm. (winter) Military professionalism, leadership theory, demonstration, and practice. Development of communicative skills.

303 Management — Concepts and Practices II (3)

Prereq: 302 or perm. (spring) Principles and functions of management. Continued leadership demonstration and practice. Continued development of communicative skills.

401 The Military and the American Society (3)

Prereq: 303 or perm. (fall) Study of military and professional soldier in democratic society and military as socializing institution. Communicative skills via student oral presentations and written reports emphasized.

402 Strategy and the Use of Force (3)

Prereq: 401 or perm. (winter) Evaluation of strategy and study of arms control, general and limited war. Continues communicative skills via student presentations and written reports. Emphasizes qualities and techniques of leadership.

403 American Defense Policymaking (3)

Prereq: 402 or perm. (spring) Organization and case studies in defense policymaking and bureaucratic decision making. Continues communicative skills and techniques of leadership.

AFRICAN STUDIES

See International Studies.

AFRO-AMERICAN STUDIES

The Department of Afro-American Studies offers an interdisciplinary curriculum for students pursuing careers in education, public and private agencies, business, industry, social service programs, community centers, and minority affairs. Students completing the program will receive the bachelor of arts degree from the College of Arts and Sciences with a major in Afro-American studies. The range of courses offered includes communications, education, political science, psychology, social science, and literature as these reflect the Afro-American and Third World experiences.

The requirements for a major in Afro-American studies consist of 75 hours, including the core requirements of AAS 106, plus 201 or 202, and one course from AAS 110, 150, 180, or 220, in addition to a minimum of 28 hours in a focal area—either the social sciences or the arts and humanities. The focal area must include at least one course from four of the groups below and at least 16 hours at or above the 300 level.

SOCIAL SCIENCES: *Group I:* AAS 340, 362, 364; *Group II:* AAS 341, 430, 432, 442; *Group III:* AAS 331, 360, 368, 370; *Group IV:* AAS 430/530, 460; *Group V:* AAS 380, 473.

ARTS AND HUMANITIES: *Group I:* AAS 210, 211, 310, 311, 411; *Group II:* AAS 315, 316, 317, 318; *Group III:* AAS 250, 350; *Group IV:* AAS 355, 356.

The minimum grade-point average required for graduation is 2.0 (C) in all courses attempted. A grade of at least C is required in each major course.

The minor in Afro-American studies consists of a minimum of 28 hours of coursework. The interdisciplinary concentration requires at least one course from each of the two focal areas, at least two additional courses at the junior or senior level, and AAS 106 Introduction to Afro-American Studies. A minor concentration in either social sciences or the arts and humanities consists of a minimum of 28 hours, including at least 20 hours in the chosen area and AAS 106.

Advising is an essential element in the Afro-American Studies Program. Each major works closely with a faculty member whose capabilities are related to the student's academic interests.

106 Introduction to Afro-American Studies (5)

Interdisciplinary course designed to introduce students to field of Afro-American studies. Focuses upon subject matter, scope, assumptions, and methods of various academic disciplines that are constituent parts of Afro-American Studies Program, and seeks to show how these disciplines collectively contribute to broadest understanding of Afro-American experience and, thus, of general American experience from black perspective.

110 Introduction to Afro-American Literature (4)

Provides general introduction to and overview of canon of Afro-American literature. By examining variety of texts, genres, themes, and issues in literature by black Americans, seeks to establish foundations and achievements of Afro-American literary tradition. Examines various critical approaches to study of literature.

113 Literature of Africa: Introduction (4) (2T)

Survey of literature by African authors. Deals with expression of African experiences via novels, plays, and poetry.

135 History of Colonialism (4)

Historical-social analysis of development of colonialism in Africa, how colonialism led to underdevelopment of Africa, and review of ideological justification of this phenomenon. Special focus placed on development of colonialism in 19th and 20th centuries up to Year of Africa (1960). Specific attention given to ideological contribution of Frantz Fanon to colonial situation. Combination of books in fields of history, psychology, economics, and literature so student will obtain integral picture of colonial period.

150 Introduction to Black Media (4) (2H)

Historical analysis of images of blacks in cinema, radio, and television programming; origin and development of stereotypes; relationship of these images to societal developments; examination of alternatives.

180 Introduction to Afro-American Education (4)

Explores historical and philosophical foundations, development of education for Afro-Americans, and formulation of dual educational system. Further, makes comparisons and contrasts among various philosophical views which have shaped formation of American educational institutions, theories, and practices.

201 Afro-American History I, 1526-1865 (4) (2S)

Survey of key economic, political, ideological, and social elements that shaped destinies of black people in United States from 1526 to 1865.

202 Afro-American History II, 1865 to Present (4) (2S)

Survey of key economic, political, ideological, and social elements that have shaped destinies of black people in United States from 1865 to present.

210 Afro-American Literature I (4) (2H)

First of 2-qr survey of Afro-American literature. Covers period from about 1760 to end of Harlem Renaissance. Focuses on such writers as Phillis Wheatley, Frederick Douglass, Charles W. Chesnut, Paul Laurence Dunbar, James Weldon Johnson, and writers of Harlem Renaissance — Claude McKay, Jean Toomer, Langston Hughes, Countee Cullen, Zora Neale Hurston. Folk literature and other materials important to understanding of Afro-American literary tradition will be included.

211 Afro-American Literature II (4) (2H)

Begins where 210 ends. (However, 210 not a prereq.) Treats Afro-American literary expression from around 1940 to present. Writers included are Richard Wright, Margaret Walker, Gwendolyn Brooks, Ralph Ellison, James Baldwin, Amiri Baraka, Ishmael Reed and others who have contributed to Afro-American literary tradition.

220 Theories of Afro-American Social Development (4) (2S)

Exploration of theories of political policies and economic processes, their interrelations, and their influence on socio-economic character of black community.

225 History of the Black Worker (4) (2S)

Analysis of historical role of black labor force in American economy, with emphasis on patterns of relationships between black workers and general organization of American labor movement.

235 Comparative Neo-Colonialism (4) (2T)

Attention paid to historical-social analysis of neo-colonialism – how new methods and maneuvers used to exploit labor and resources in 20th century. Focus on Africa, although students' areas of interest will also be accommodated.

250 Foundations of Afro-American Arts and Culture (4) (2H)

Provides introductory examination of Afro-American experience through concern with socio-cultural approaches to modes of thought, cultural institutions, historical experiences, life-styles, and artistic expression. As cultural history, designed to provide understanding of foundations, sources, and history of ideas of Afro-American experience. Considers influence of traditional African arts and culture on development of cultural traditions in Americas, early Afro-American arts and crafts, and development of the Afro-American culture tradition from slavery to present.

254 History of Injustice in the United States (5)

Critical analysis of problems of injustice in U.S. Special attention given to 1) education, 2) voting, 3) social services, 4) fair housing, and 5) legal system.

310 Contemporary Afro-American Literature (4) (2H)

Focuses on Afro-American literature of 1960s and since. Concern with writers who emerged as major figures during this period. Attention also given to major literary, cultural, and esthetic developments that fashioned new favorability among black writers.

311 Afro-American Literature: Special Topics (4)

Prereq: soph rank. Intensive study of selected theme or topic. Course will vary from qtr to qtr; thus students should check departmental brochure to ascertain topic any given qtr.

315 Literature of West Africa (4) (2T)

Prereq: jr or sr rank. Intensive examination of representative works, authors, and movements. Using cultural and socio-political perspectives as springboards, course seeks to define style, structure, and mode and to indicate how these interrelate, help to determine meaning, form, etc. Authors like Achebe, Armah, Senghor, Soyinka, Laye and Oyono, Mongo Beti and Kofi, Awoonor, and Ama Ata Aidoo considered, to analyze e.g., Negritude, phases in West African writing during last 30 yrs. Essays and critical literature given some attention.

316 Literature of South Africa (4) (2T)

Explores development of South African literature (poetry, prose, novels, autobiography, short stories, and drama) since 1940s and while confining itself to writings of black writers of all complexions, examines how this literature reflects conditions of life of majority of South African population. Course entails vast landscape of structured background reading on history, politics, economics, and demography of South Africa and on esthetics of particular cultures.

317 Caribbean Literature: Major Authors and Movements (4)

Survey of literature in English and translations written by Caribbean authors. Major themes and literary movements of Caribbean discussed: Negritude, Negritismo, ancestral imperative, search for identity, reordering of group images. Transcultural and syncretic elements discussed. Outside readings essential for class contributions.

331 Race and Ethnicity, A Cross-National Perspective (4)

Review of various theories of race. Critique of diverse definitions of ethnic groups. Due attention given to problem of ethnicity in international arena. Cross-national comparisons made of ethnic processes in developing countries, vis-a-vis ethnic processes in U.S., Western and Eastern Europe.

340 The Black Community in Post-World War II (4) (2S)

Survey of black community's development during 20th century and its relation to development of larger American society over same period. Focus on post-WW II community processes.

341 Afro-American Personality (4)

Prereq: PSY 101. Examination of organization and structure of Afro-American personality within American and African socio-psychological contexts. Special emphasis on various forces which shape Afro-American personality.

350 Afro-American Arts and Artists (4) (2H)

Intensive study of Afro-American artists, esthetic principles, and arts movements in contemporary black art from the late 19th century to present. Development of black professional artists, artists of Harlem Renaissance, black cultural nationalist art, modernism and Afro-American artists, social protest, and street murals among topics covered.

355 History of Afro-American Music I Slavery - 1926 (4) (2H)

Socio-historical examination of Afro-American music and its role in shaping American music. Recordings and guest lecturers used as integral part of course. Examines spirituals, rural blues, ragtime, and early jazz.

356 History of Afro-American Music II 1926 - Present (4) (2H)

Socio-historical analysis of Afro-American music, its role in shaping modern American music. Recordings and guest musician/lecturers used as integral part of course. Examines big band era, urban blues, bebop, rhythm and blues, hard bop, black classical composers, contemporary popular, and avant garde musics.

359 Contemporary Black Cinema (4)

Examines esthetics in black cinema of Afro-America, Caribbean, and Africa in post-WW II era. Examines representative black filmmakers and films deriving from black socio-cultural tradition. Representative films screened and discussed. Selected filmmakers and/or critics will make presentations on esthetics in black cinema. Interdisciplinary format coalescing various areas of arts and humanities and involving philosophy of art and esthetics, film theory and criticism, cultural criticism, and political economy of film.

360 Black Politics in the United States (4) (2S)

Examines American political system from perspective of black political behavior and relationship of blacks to political system at national, state, and local levels. Includes analysis of civil rights movement as well as socio-political movements associated with ideologies of black nationalism and black liberation.

364 Comparative Study of Injustice (4)

Comparative analysis of different approaches to civil and human rights in selected developed and developing countries. Review of theory of justice and political consequences in chosen countries.

368 Black Political Thought (4) (2S)

Analysis of basic tenets of black thought in U.S. Emphasis on theoretical dimensions of post-Civil War black social and political thinkers.

369 Experimental Course (1-5)

This number is restricted to courses that may be offered no more than twice under this designation. For use with courses with which faculty members may wish to experiment before making them part of regular curriculum.

370 Urban Violence (4)

Systematically examines empirical and theoretical literature on urban violence, particularly riots during 1960s.

380 Seminar: Afro-American Education (4)

Systematic study of contemporary issues in Afro-American education, including multi-ethnic studies versus black studies, bus-ing, affirmative action, quality education.

411 Literature Seminar (4)

Subject will vary. May be repeated as subject changes.

430 Social Theories of Underdevelopment (4)

Systematic review of problems of social change in developing areas from multidisciplinary point-of-view. Due attention given to problems of agrarian reform, urbanization as social process, regional disparities within framework of single nation/state *inter alia*. Comparative analysis of problems of social development undertaken typologically.

431 Psychology of Neo-Colonialism (4)

Examination of role of neo-colonialism in shaping social psychology of oppressed. Special examination made of works of Fanon, et al.

432 Problems of National Oppression (4)

Comparative study of varieties of national oppression. Question of ethnonationalism, clerical nationalism, and other forms of response to oppression reviewed. Due attention given to various notions of Pan-Africanism, and Black Nationalism in U.S., Africa, and Latin America.

440 The Black Child (4) (2S)

Entails in-depth analysis of black child, impact and effects of growing up black in America. Specifically, seeks to determine effects and role of family, school, neighborhood, economic status, and society at large on sociological and psychological development of black child.

442 The Black Family (4)

Black family in America and its important role in development of ethnic differences, strengths, and strategies.

460 Social Processes: Third World Urbanization (4)

Deals with laws of development of urbanization as it relates to anatomy of civil society. Special focus on how current urban crisis related to structural, cyclical, and general crisis of modern society. Political economy of urban ghetto both in U.S. and Third World singled out for special inquiry. New thought given to suburbanization process, so-called "Post City Phenomenon," etc. Due focus on connection between urban crisis, racial problems, and possibility of American apartheid. Urbanization as social process in Africa, Asia, and Latin America studied comparatively.

473 Techniques of Teaching in the Inner City (5)

Provides instructional experiences which allow student to develop skills in using systematic instruction in inner-city schools by permitting each student to demonstrate successfully his or her proficiency in use of various teaching strategies which will enhance learning in inner-city schools. Visits to selected metropolitan inner-city schools made throughout qtr.

490 Independent Study (1-5)

Prereq: prior perm. Primarily for students interested in concentrated study in specific area in cooperation with advisor.

ANTHROPOLOGY

General Emphasis

Anthropology may be broadly defined as the scientific study of humankind. This discipline has two major foci: humans as biological organisms and as cultural beings. Anthropology has three subfields: biological anthropology, cultural anthropology, and archaeology. Thus, anthropology is a holistic, comparative, and functional discipline which provides a broad framework through which human activities, adaptations, and changes may be meaningfully interpreted in time and in space. Courses in anthropology provide a cross-cultural awareness to students in all fields and are particularly useful for students in the *social sciences*, the *environmental sciences*, *journalism*, *education*, *biological sciences*, *linguistics*, *cross-cultural communication*, *dance*, *photography*, *film*, and *others*.

Preparation in Anthropology

Students who are interested in becoming professional anthropologists may prepare for graduate school in the Department of Sociology and Anthropology. The anthropology major offers students training in the methods and results of *cultural anthropology*, *biological anthropology*, and *anthropological archaeology*. A minor in anthropology is also available for those students

who wish to add a cross-cultural dimension to their University education.

Advising

Majors are *required* to select their *advisors* from among the anthropology faculty. As student interest shifts, the advisor may be changed to reflect new interests. An advisor will aid in the design of an individualized course of study. Nonanthropology courses can be declared as anthropology credit towards the major with permission from the advisor: for example, an interest in ethnobotany may lead to botany courses counting as part of an anthropology major. Of the total hours required, however, no fewer than 43 hours must be in departmental anthropology courses. Students are encouraged to take courses in fields related to anthropology (for instance, courses in botany, zoology, geology, geography, linguistics, international studies, mathematics, psychology, sociology, and so on may be recommended for students interested in particular anthropological specialties). All majors are required to take the introductory courses in *cultural anthropology* (101); *biological anthropology* (201); and *anthropological archaeology* (202).

Course Requirements

For a *major* in anthropology:

	Credit Hours
ANTH 101, 201, 202	15
16 additional hours in anthropology at the 400 level	16
24 additional hours in anthropology courses at any level	24
TOTAL	55

For a *minor* in anthropology:

	Credit Hours
ANTH 101	5
ANTH 201 or 202 (both recommended)	5
16 additional hours in anthropology (to include 4 hours at 400 level and 4 additional hours at the 300 or 400 level)	16
TOTAL	26

101 Introduction to Cultural Anthropology (5) (2T)

Basic concepts; introduction to various world cultures; nature of cultural diversity; evolution of sociocultural systems. Qualifies as Tier II non-Western-cultures course.

201 Introduction to Biological Anthropology (5) (2N)

Evolutionary theory; primates; fossil record of human evolution; mechanics of evolution; human variation.

202 Introduction to Anthropological Archaeology (5) (2S)

Basic concepts, and how archaeologists date and reconstruct extinct lifeways and explore evolution.

348 Education: Cross-cultural Perspectives (4)

Prereq: 101. Survey of ways of growing up in various cultures, emphasizing relationships between individual and culture.

350 Economic Anthropology (4)

Prereq: 101. Survey of economic arrangements found in various types of cultural systems; economic exchange systems in non-Western cultures; anthropological analysis of economic life.

351 Political Anthropology (4)

Prereq: 101. Anthropological exploration of various political systems around world; cross-cultural examination of political leadership, political power, warfare, etc.

352 Archaeological Anthropology (4)

Prereq: 101, 202. Introduction to new archaeology in which goals, theory, and method are directed toward reconstruction of extinct sociocultural systems rather than toward time-space distribution of archaeological materials.

355 Medical Anthropology (4)

Prereq: 101. Non-Western medical systems and theories of health and disease causation; social basis for diagnosis and cure; curing rituals; symbolism of health and illness. Ecological factors in health and nonhealth; systemic connections between health concepts, culture, and environmental situation.

356J Writing in Sociology and Anthropology (4)

Prereq: jr rank and perm or 13 hrs sociology and/or anthropology. Jr-level composition course for sociology and anthropology majors and students in related fields. Combines writing instruction with consideration of substantive social science topic. Students will try various genres of social science writing (book reviews; grant proposals; field notes; interviews, etc.)

357 Anthropology of Religion (4)

Prereq: 101. Anthropological consideration of ritual and myth in various cultures; shamanism, trance, taboo, etc., in social system-ic and ecological perspective. Comparison of different anthropological frameworks for understanding religious phenomena in an objective, social scientific way.

358 Women: A Cross-Cultural Survey (4)

Prereq: 101. Cross-cultural survey of women with emphasis on factors determining roles and status of women in various types of cultural systems.

366 Cultures of the Americas (4)

Prereq: 101. Survey of cultural diversity present in North, South, or MesoAmerica or the Caribbean with emphasis on application of anthropological method and theory to understanding of particular sociocultural systems.

371 Ethnology (4)

Prereq: 101. In-depth consideration of topics covered in 101; anthropological theory and frames of analysis.

372 Cultures of the World (4)

Prereq: 101. Ethnographic sampling of similarities and differences in cultural systems found around world and through time. Ethnographic focus varies.

373 Perspectives in Anthropology (4)

Prereq: 101, 201, or 202. Includes topics from following areas of anthropological concern: nature of scientific inquiry, ethnology, linguistics, archaeology, biological anthropology.

375 Culture and Personality (4)

Prereq: 101; psychology recommended. Interrelations between personality systems and cultural systems.

376 Culture Contact and Change (4)

Prereq: 101. Impacts of cultures upon one another: immediate and subsequent cultural adaptations; theory of change.

377 Peasant Communities (4)

Prereq: 101. Focuses on folk component of state societies.

378 Human Ecology (4)

Prereq: 101 or 201. Analysis of mutual and reciprocal relations between sociocultural systems and other systems in their environment; ecosystems and biotic communities in which human populations are included.

381 Cultures of Sub-Saharan Africa (4)

Prereq: 101. Survey of cultural diversity present in Sub-Saharan Africa with emphasis on application of anthropological theory and method to understanding of particular sociocultural systems.

382 Archaeology of Europe (4)

Prereq: 101. Archaeological material of European cultures from Neolithic to early Middle Ages; problems of analysis and research.

385 Cultures of Southeast Asia (4)

Prereq: 101. Survey of cultural systems of island and mainland Southeast Asia.

386 Problems in Southeast Asian Anthropology (4)

Prereq: 101. Selected topics of current theoretical concern relating to Southeast Asia; comparison of different frames of analysis.

387 Cultures of Oceania (4)

Prereq: 101. Anthropological exploration of Pacific island cultures and their development.

391 Primate Social Organization (4)

Prereq: 101. Exploration of nonhuman primate social behavior and social organization from anthropological perspective, with special focus on development of human cultural behavior.

399 Readings in Anthropology (1-3, max 6)

Prereq: 101 and perm. Supervised readings in various fields of anthropology: archaeology, ethnology, linguistics, biological anthropology.

455 Seminar in Methodology and Field Research (1-4, max 8)

Prereq: 13 hrs and perm. Practical training in application of methods to data in 1 of following subfields: archaeology, ethnology, biological anthropology.

460 Kinship (4)

Prereq: 9 hrs. Theoretical framework and ethnographic work on kinship systems of various world cultures; non-Western family systems; kinship terminology, social change in kinship systems.

472 History of Anthropological Thought (4)

Prereq: 101, 201, or 202. In-depth examination of schools of anthropology as they have developed within various subfields at different times and places.

490 Independent Research in Anthropology (1-10, max 10)

Prereq: open to srs only; 20 hrs anthropology and written perm prior to qtr in which study is begun. Individual research in anthropology in specific problem areas in which student has demonstrated ability and interest.

492 Human Evolution (4)

Prereq: 201. In-depth examination of evidence for biological macroevolution of humankind. Hominoid and hominid fossil record; speciation; interpretation of fossil remains; and "fit" between paleontological and immunological approaches.

494A Seminar in Cultural Anthropology (4)

Prereq: 2 anthropology courses at 300 level or above, OR perm. Advanced course dealing with topics of current research interest in cultural anthropology. Topic varies according to individual course.

494B Seminar in Biological Anthropology (4)

Prereq: 2 anthropology courses at 300 level or above, OR perm. Advanced course dealing with topics of current research interest in biological anthropology. Topic varies according to individual course.

494C Seminar in Archaeological Anthropology (4)

Prereq: 2 anthropology courses at 300 level or above, OR perm. Advanced course dealing with topics of current research interest in archaeological anthropology. Topic varies according to individual course.

494D Seminar in Human Ecology (4)

Prereq: 2 anthropology courses at 300 level or above, OR perm. Advanced course dealing with topics of current research interest in human ecology. Topic varies according to individual course.

496 Human Diversity (4)

Prereq: 201. Exploration of human biological diversity/variability with emphasis on the populationist approach, namely anthropological genetics and demography.

ARABIC

See Foreign Languages and Literatures.

ARCHAEOLOGY

Classical Archaeology, see Foreign Languages and Literatures. Archaeological Anthropology: See Anthropology.

ART

100 Seeing and Knowing the Visual Arts (3) (2H)

Introduction to perceiving and understanding meanings and organizational systems in traditional and contemporary visual arts in context of their social and cultural backgrounds.

101 Two-Dimensional Design (4) (2H)

Studio projects exploring vocabulary of 2-dimensional design and

dynamics of color systems. Introduction to processes and media. Not open to jr or sr art majors.

102 Three-Dimensional Design (4) (2H)

Studio projects in 3 dimensions exploring ordered and dynamic interactions of mass, plane, volume, and space. Introduction to processes and media. Not open to jr or sr art majors.

105 Introduction to Painting (4) (2H)

Survey of formal painting concerns including color and composition. Studio emphasis; 5 lec per qtr. Not open to jr or sr art majors.

115 Introduction to Ceramics (4) (2H)

Exploration of ceramic techniques for familiarization with range of expression available through ceramic materials. Projects, demonstrations, lectures and discussions. Not open to jr or sr art majors.

128 Introduction to Drawing (4) (2H)

Use of line, tone, perspective, and texture in objective drawing; development of motor control and visual skills; use of drawing tools. Not open to jr or sr art majors.

131 Introduction to Sculpture (4) (2H)

Exploration of traditional and modern concepts of sculpture; lectures, projects and discussions. Not open to jr or sr art majors.

141 Introduction to Printmaking (4) (2H)

Printmaking concepts and processes including silkscreen, lithography, etching, and relief prints. Projects, demonstrations, and discussions. Not open to jr or sr art majors.

151 Introduction to Graphic Design (4) (2H)

Studio projects in lettering, typography, spatial design, illustration, and media with emphasis on graphic design as visual communication. Not open to jr or sr art majors.

191 Introduction to Photography (4) (2H)

Introduction to art and techniques of photography for majors or nonmajors. Students must have suitable cameras and supply processing and enlarging accessories. 1 lec. 4 lab hrs per wk.

192 Basic Photography (4)

Prereq: 191 or portfolio and perm. Continuation of 191. Approaches picture-making problems and advanced control of media for prospective majors.

205 Basic Painting (4)

Prereq: 12 hrs studio art or perm. Development of formal, technical, and conceptual attitudes in painting.

206 Intermediate Painting (4)

Prereq: 205. Problems in painting investigating recent developments and formal concepts.

207 Intermediate Painting (4)

Prereq: 206. Continuation of 206.

215 Handbuilding (4)

Prereq: 12 hrs studio. 3-D form exploration using additive construction processes. Simple engobe, slips, and claybody formulations accompany these projects.

216 Introduction to Wheel Throwing (4)

Prereq: 215. Introduction to creative possibilities of potter's wheel. Functional projects utilizing decorative skills from ART 215.

217 Combined Techniques (4)

Prereq: 215, 216. Projects designed to expand information introduced in 215-216. Increase in scale and scope of individual solutions. Wheel throwing and handbuilding.

228 Basic Drawing (4)

Prereq: 12 hrs studio art or perm. Emphasis on techniques of drawing. Composition, proportion, and disciplined seeing; text may be used.

231 Sculpture: Wood Carving (4)

Prereq: 12 hrs studio art or perm. Introduction to tools, techniques, and esthetics of sculpture in wood.

232 Sculpture: Figure Modeling (4)

Prereq: 12 hrs studio art or perm. Introduction to sculpture in clay, based upon human figure; includes slide presentations; expression through form and gesture emphasized.

236 Sculpture: Metal Design (4)

Prereq: 12 hrs studio art or perm. Introduction to historic and

functional applications of metals and other materials; includes silversmithing, forging, and casting.

241 Lithography (4)

Prereq: 12 hrs studio art or perm. Introduction to basic lithographic drawing and printing. Emphasis on application of techniques to image making.

242 Intaglio (4)

Prereq: 12 hrs studio art or perm. Introduction to basic techniques of intaglio printmaking including etching, dry-point, aquatint, and color printing. Emphasis on application of techniques to image making.

247 Relief Printing (4)

Prereq: 12 hrs studio art or perm. Basic techniques of relief printing from wood, metal, and assembled plates in black and white and color. Emphasis on application of techniques to image making.

248 Serigraphy (4)

Prereq: 12 hrs studio art or perm. Basic techniques of screen printing including hand-cut stencils, photographic stencils, and multicolor printing. Emphasis on application of techniques to image making.

251 Graphic Design: Typography (4)

Prereq: 12 hrs studio art or perm. Typography as designer's tool and as communication. Emphasis on design of symbols and type faces.

252 Graphic Design: Three-Dimensional (4)

Prereq: 12 hrs studio art or perm. Examination of 3-dimensional design problems with special attention to environment, packaging, and display.

253 Graphic Design: Illustration (4)

Prereq: 12 hrs studio art or perm. Pictorial imagery as design tool. Problems in product, poster, magazine, and book illustration.

254 Graphic Design: Lettering (4)

Prereq: art education major or perm. Lettering as design and communication element. History and techniques of lettering and calligraphy.

271 Introduction to Art Therapy (5)

Prereq: PSY 101 and 12 hrs studio art. Survey of art therapy field, its history and background. Exploration of basic theoretical concepts, use of case histories, research methods, and present clinical practices.

275 Fibers (4)

Prereq: 12 hrs studio art or perm. Felting, spinning, natural dyeing methods; off-loom fabric constructions.

276 Fibers (4)

Prereq: 275 or perm. Introduction to weaving on multi-harness floor looms.

295 Intermediate Photography (5)

Prereq: 192, portfolio review, photography art majors only and perm. Thorough presentation of craftsmanship in photography with emphasis on esthetics. 3 lec, 4 labs.

296 Intermediate Photography (5)

Prereq: 295. Black and white and color transparencies and slide show productions. Investigation of sequential imagery with sound synchronization. Continuation of 295.

297 Intermediate Photography (5)

Prereq: 296. Color printing from negative color materials.

303 Watercolor (5)

Prereq: 207, 228. Techniques of transparent watercolor.

304 Watercolor (5)

Prereq: 303. Continuation of 303.

305 Advanced Painting (5)

Prereq: 207. Development of personal goals and identification of issues with emphasis on individual, creative problems in painting.

306 Advanced Painting (5)

Prereq: 305. Continuation of 305.

307 Advanced Painting (5)

Prereq: 306. Continuation of 305-306.

308 Figure Painting (5)

Prereq: 207 and 328. Painting from model.

309 Figure Painting (5)

Prereq: 308. Continuation of 308.

312 Ceramic Throwing (3)

Prereq: 216. Intermediate throwing problems. Throwing pursued with goal of developing skilled production potters. Course content directed toward, but not limited to, utilitarian object making. Sensitivity toward quality of ware and value of hand-made object stressed.

313 Advanced Ceramic Throwing (3)

Prereq: 312 or perm. Continuation of 312.

314 Ceramic Science (5)

Prereq: 12 hrs studio, 217. Comprehensive study of function of ceramic materials in clay and glazes, effect of firing temperatures, and practical and empirical techniques of using ceramic materials.

315 Ceramics (5)

Prereq: 217. Clay body formulation, wheel throwing, hand building, engobes, kiln firing, salt glazing, and vapor glazing techniques.

316 Ceramics: Porcelain (5)

Prereq: 315. Study of white and porcelainous clay materials, effects on glazes, and limiting characteristics.

317 Ceramics: Stoneware (5)

Prereq: 316. Stoneware materials and high-temperature reduction firing.

321 Drawing Workshop (4)

Prereq: 328 or perm. (not offered every quarter) Projects using traditional techniques and drawing media including pen and ink and silver-point.

322 Drawing Workshop (4)

Prereq: 321. Continuation of 321.

328 Intermediate Drawing (4)

Prereq: 228. (not offered every quarter) Drawing from model. Proportion, structure, and form. Various media.

329 Advanced Drawing (4)

Prereq: 328. (not offered every quarter) Approach to personal imagery in drawing. Individual response to traditional and modern drawing attitudes.

331 Sculpture: Wood Carving (5)

Prereq: 8 hrs sculpture including 231. Advanced wood sculpture.

332 Sculpture: Figure Modeling (5)

Prereq: 8 hrs sculpture or perm. Figure studies in clay. To develop better perceptions of masses in space and esthetic relationships. Expression through form and gesture emphasized.

333 Sculpture: Metals (5)

Prereq: 8 hrs sculpture including 233. Introduction to techniques of sculpture in metal including casting and welding processes and historical and esthetic development.

334 Sculpture: Wood Fabrication (5)

Prereq: 8 hrs sculpture or perm. Introduction to joining and fastening techniques, additive sculptural processes, and use of power equipment and hand tools in production of sculpture; development of sensitivity toward sculptural ideas.

337 Sculpture: Furniture Design (5)

Prereq: 8 hrs sculpture or perm. Woodworking sculpture techniques applied to furniture design as medium for visual expression. Methods of furniture construction including machine woodworking and joinery. Study of utilitarian design, furniture types and purposes, human factors, and esthetics of functionalism.

341 Advanced Printmaking (5)

Prereq: 8 hrs printmaking. Supervised studio experience in printmaking media of student's choice (intaglio, lithography, relief and/or serigraphy); includes demonstrations and lectures on related topics. Emphasis on development of techniques and concepts of printmaking.

342 Advanced Printmaking (5)

Prereq: 341. Continuation of 341.

343 Advanced Printmaking (5)

Prereq: 342. Continuation of 341-342.

351 Graphic Design: Typography (5)

Prereq: 251. Practical and experimental type design including typesetting, reproduction, and printing processes.

352 Graphic Design: Exhibit (5)

Prereq: jr rank. Exhibit and presentation as environmental design and communication including educational, museum, and commercial exhibit applications.

353 Graphic Design: Illustration (5)

Prereq: 253. Continuation of 253.

354 Graphic Design: Media (5)

Prereq: 8 hrs of graphic design or perm. Time, motion, light, and sound as design and communication tools. Problems in design with film, slides, overhead projection, sound track, and video tape.

355 Film Animation (5)

Prereq: FILM 361 or perm. Design problems in 16mm film animation. Basic methods and camera techniques.

360 Art for Elementary Teachers (6)

Prereq: jr rank. To provide future elementary teacher with comprehensive understanding of nature of art materials and children's art work.

371 Art Therapy (5)

Prereq: 271. Application of art and psychology to art therapy work. Exploration of projective techniques. Studio work will develop personal, psychological insights, appreciation of emotions, symbolism, and processes of group interaction.

375 Fibers (5)

Prereq: 276 or perm. Introduction to 3-dimensional construction methods; basketry techniques, crochet, and weaving.

376 Fibers (5)

Prereq: 375. Fabric manipulation methods: designing with sewing, piecing, stitching, quilting; surface design with resist-dye techniques (batik, ikat).

391 Photographic Arts (5)

Prereq: 297, portfolio review, and perm. View camera techniques and creative and technical applications of view camera format in black and white photography.

392 Photographic Arts (5)

Prereq: 297, portfolio review, and perm. Application of series and sequential imagery to expression in photography.

393 Photographic Arts (5)

Prereq: 297, portfolio review and perm. Experimental methods and materials (gum bichromate, magazine lifts, photo-montage, quick-proof, 3-color overlays, Kodolith, and multiple printing).

394 Advanced Color Printing (5)

Prereq: 297 or portfolio review.

397 Photographic Communications (5)

Prereq: portfolio review and perm. Structured work in newspaper photojournalism.

398 Photographic Communications (5)

Prereq: portfolio review and perm. Structured work in magazine photography. Introduction to picture story.

399 Photographic Communications (5)

Prereq: portfolio review and perm. Structured work in documentary photography. Intermediate slide show production.

400 Senior Seminar in the Visual Arts (4)

Prereq: perm. Interdisciplinary course designed to deal with professional issues beyond those pertinent to specific media, to enrich experience in various areas and professional levels and to permit exchange of information on current issues in art world.

401 Painting Practicum (3)

Prereq: sr rank and perm. Preparation for sr presentation and portfolio.

405 Senior Painting Studio (5)

Prereq: 307. Advanced problems in painting.

406 Senior Painting Studio (5)

Prereq: 405. Continuation of 405.

407 Senior Painting Studio (5)

Prereq: 406. Continuation of 405-406.

410 Ceramics Practicum (3)

Prereq: sr rank and perm. Preparation for sr presentation and portfolio.

415 Ceramics: Primitive Techniques (5)

Prereq: 317. Special effects and limitations of raku, pit, wood, sawdust or saggar firing of wheel-thrown and handbuilt objects.

416 Ceramics (5)

Prereq: 415. Sr problems.

417 Ceramics (5)

Prereq: 416. Sr problems.

418 Glass (5)

Prereq: sr rank or perm. Introduction to glassblowing and other techniques in hot, cold, and flat glassworking.

419 Glass (5)

Prereq: 418 and perm.

428 Advanced Drawing (4)

Prereq: 329 (not offered every qtr) Continuation of 329.

429 Advanced Drawing (4)

Prereq: 428. Continuation of 329 and 428.

430 Sculpture Practicum (3)

Prereq: sr rank and perm. Preparation for sr presentation and portfolio.

433 Sculpture: Metals (5)

Prereq: 333. Advanced techniques in metal sculpture; emphasis on esthetic development; projects based on individual student interest.

434 Sculpture: Wood Fabrication (5)

Prereq: 334; 8 hrs sculpture. Continuation of 334.

436 Sculpture: Metal Design (5)

Prereq: 236. Advanced projects in utilitarian designs in metal based on individual student interest. Emphasis on historical base and esthetics.

438 Sculpture Seminar (5)

Prereq: sr rank, sculpture major. Contemporary issues in sculpture.

440 Printmaking Practicum (3)

Prereq: sr rank and perm. Preparation for sr presentation and portfolio.

441 Advanced Printmaking (5)

Prereq: 341-343, 441-443 to be taken in sequence. See 341. Emphasis on personal and professional development in printmaking.

442 Advanced Printmaking (5)

Prereq: 441. Continuation of 441.

443 Advanced Printmaking (5)

Prereq: 442. Continuation of 441-442.

450 Design Practicum (3)

Prereq: sr rank and perm. Preparation for sr presentation and portfolio.

451 Graphic Design: Senior Studio (5)

Prereq: 27 hrs of graphic design or perm. 2- and 3-dimensional graphic design with emphasis on professional and creative solutions. Problems in research and production.

452 Graphic Design: Senior Studio (5)

Prereq: 451 or perm. Design problems carried through all professional stages. Examination of design in context of various applications.

453 Graphic Design: Senior Studio (5)

Prereq: 452 or perm. Emphasis on individual problems and individual professional orientation. Portfolio preparation and presentation. Production of brochure and preparation of resume.

461 Art Experiences in the Elementary School (3)

Prereq: EDSE 351. Emphasizes importance of art in elementary school curriculum. Traces evolution of children's symbols from scribble to realistic representation. Teaching strategies, art materials, appropriate art processes. Field experiences and text.

462 Art Teaching in the Secondary School (3)

Prereq: jr rank. To prepare student for realities of secondary school art program environment, physical and intellectual as well as emotional. To develop positive, constructive attitudes and knowledgeable teaching skills.

471 Art Therapy Internship (16)

Prereq: 271 and 371; sr rank. Internship involves 1-qtr-long attendance in art therapy unit in hospital or mental health center. Practical experience of working with patients supported by lectures and seminars on such topics as "The Psychopathology of Art," "Group Art Psychotherapy" and "Orientation to Art Therapy in Clinical Situations."

475 Fibers (5)

Prereq: 376 or perm. Individually designed on- or off-loom projects.

476 Fibers (5)

Prereq: 475 or perm. Continuation of 475.

480 Individual Problems (1-5)

Prereq: perm. Projects, ideas, or explorations that cannot reasonably be made within regular course structures. Requires perm of faculty member prior to registration. Limit: 5 hrs.

481 Individual Readings (1-5)

Prereq: perm. Reading and research related to studio work. For projects not reasonably part of structure of regular studio courses. Requires perm of faculty member prior to registration. Limit: 5 hrs.

490 Photography Practicum (3)

Prereq: sr rank and perm. Preparation for sr presentation and portfolio.

491 Advanced Photographic Arts (5)

Prereq: 393, portfolio review, and perm. Individual problems and seminars.

492 Advanced Photographic Arts (5)

Prereq: portfolio review and perm. Individual problems and seminars.

493 Advanced Photographic Arts (5)

Prereq: portfolio review and perm. Individual problems and seminars.

494 Advanced Publications Photography (5)

Prereq: portfolio review and perm. Work in photographic communications, principally newspapers and magazines.

495 Advanced Publications Photography (5)

Prereq: portfolio review and perm. Work in photographic communications.

496 Advanced Publications Photography (5)

Prereq: portfolio review and perm. Work in photographic communications.

497 Advanced Photoillustration (5)

Prereq: portfolio review and perm. Investigation of tools and uses of applied photography and special problems of illustration.

498 Advanced Photoillustration (5)

Prereq: portfolio review and perm. Investigation of tools and uses of applied photography and special problems of illustration.

499 Advanced Photoillustration (5)

Prereq: portfolio review and perm. Investigation of tools and uses of applied photography and special problems of illustration.

ART HISTORY

211 History of Art (4) (2H)

Survey of western painting, sculpture, and architecture from pre-historic to Early Christian. Students advised to enroll in 211, 212, and 213 in sequence.

212 History of Art (4) (2H)

Continuation of 211 from Early Christian period of Europe through Renaissance. Students advised to enroll in 211, 212, and 213 in sequence.

213 History of Art (4) (2H)

Continuation of 212 from Baroque to present. Students advised to enroll in 211, 212, and 213 in sequence.

307 History of Photography (3)

Prereq: soph rank or perm. Historical development of photography from its inception to present including comprehensive study of artistic and technical developments and of major photographers and movements.

308 History of Photography (3)

Prereq: 307. Continuation of 307.

309 History of Photography (3)

Prereq: 308. Continuation of 307-308.

320 Greek Art (4)

Prereq: 211-213 or perm. Art of ancient Greece.

321 Roman Art (4)

Prereq: 211-213 or perm. Art of ancient Rome.

322 Medieval Art (4)

Prereq: 211-213 or perm. Art of Europe from age of Constantine to art of Giotto.

323 Italian Renaissance Art (4)

Prereq: 211-213 or perm. Art of 15th-century Italy.

324 Northern Renaissance Art (4)

Prereq: 211-213 or perm. Art of Northern Europe in 15th and 16th centuries.

325 Art of High Renaissance and Mannerism (4)

Prereq: 211-213 or perm. Art of 16th-century Italy.

326 Baroque and Rococo Art (4)

Prereq: 211-213 or perm. Art of 17th- and 18th-century Europe.

327 Art of the Nineteenth Century (4)

Prereq: 211-213 or perm. European painting and sculpture from French Revolution through Symbolism.

328 Modern Art (4)

Prereq: 211-213 or perm. Art of Europe from 1880 to 1945.

329 The Arts of the United States (4)

Prereq: 211-213 or perm. Art in U.S. from Colonial period to 1865.

330 The Arts of the Orient (4) (2T)

Prereq: 211-213 or perm. Art of India, China, and Japan.

331 Pre-Columbian Art (4) (2T)

Prereq: 211-213 or perm. Preconquest art of Mexico, Central and South America.

332 African Art (4) (2T)

Prereq: 211-213 or perm. Traditional art of West and Central Africa.

333 Ancient Near Eastern Art (4) (2T)

Prereq: 211-213 or perm. Motifs and monuments of Egypt, Mesopotamia, Assyria, and Babylonia.

340 Art and Ideas in Painting (4)

Prereq: sr rank, 211-213, and 1 art history course or perm. Examination of approach of painters of western art to their work. Non-historical in nature, using subject matter as framework and foundation with ideas and concepts concerning creative act and artist/work-of-art relationship.

350 Principles of Architecture (4)

Introduction to styles, theories, and structural principles of architecture.

351 Ancient Architecture (4)

Survey of architectural monuments and their historical settings in Near East, Egypt, Greece, and Rome.

352 Medieval Architecture (4)

Survey of architectural monuments and their historical setting in early Christian, Byzantine, Romanesque, and Gothic periods.

353 Renaissance and Baroque Architecture (4)

Survey of architects and monuments from 15th through 18th century.

354 19th and 20th Century Architecture (4)

Survey of architects and monuments from historical revival styles through recent stylistic trends.

360 Seminar in Art Historiography (4)

Prereq: advanced work in art history or perm. Investigation of various methodological approaches to study of art.

480 Individual Problems (1-6)

Prereq: perm. Projects, ideas, or explorations that cannot reasonably be made within regular course structures. Requires perm of faculty member prior to registration. Limit: 6 hrs.

481 Individual Readings (1-6)

Prereq: perm. Reading and research in art history, which cannot reasonably be made within regular course structure. Requires perm of faculty member prior to registration. Limit: 6 hrs.

ASTRONOMY

See Physics and Astronomy.

AVIATION

Due to changes in economic conditions, it may be necessary to adjust the special fees for flight courses. Current information can be found in the Schedule of Classes.

110 Private Pilot Ground Instruction (4)

40 hrs ground instruction covering radio navigation, meteorology, FAA regulations, communications, aircraft construction, and performance data to meet requirements of private pilot's written exam. 2 lec.

240 Private Pilot Flight Course (4)

Prereq: FAA written passed or perm. 40 hrs flight training and related lectures including primary flight maneuvers and cross-country flying. Meets requirements for private pilot's certificate. 1 lec, 3 lab. Course fee \$1,460.

240A Introduction to Flight (2)

Prereq: 110 and perm. 13 hrs of dual and solo flight instruction in fundamentals of flight. Meets AFROTC curriculum requirements. Course fee \$520 for nonFIP students.

310 Commercial Pilot Ground Instruction (4)

Prereq: private pilot's certificate or perm. 40 hr ground instruction covering advanced aerodynamics, radio navigation, FAA regulations, aircraft construction and performance, and instruments to meet requirements of commercial written exam. 2 lec.

340 Commercial Flight Course, Part I (4)

Prereq: private pilot's certificate. 40 hrs flight training consisting mainly of cross-country. 3 lab. Course fee \$1,360.

343 Commercial Flight Course, Part II (4)

Prereq: private pilot's certificate and 340 or perm. 35 hrs flight training consisting mainly of solo cross-country to build flying time toward higher rating, 5 hrs complex airplane time included. 3 lab. Course fee \$1,430.

350 Instrument Ground Instruction (4)

40 hrs ground instruction covering various navigation systems, aircraft radios, instruments and their interpretation, instrument flying procedures, and meteorology to meet requirements for instrument pilot written exam. 2 lec.

400 Commercial Flight Course, Part III (4)

Prereq: FAA written passed or perm. 35 hrs of instruction of flight by sole reference to instruments. 3 lab. Course fee \$1,540.

410 Fundamentals of Aviation for Teachers (4)

Prereq: 110 or perm. Comprehensive course covering aeronautical knowledge required of private pilot: navigation, weather, federal regulations, theory of flight, aircraft performance, radio communications and navigation, and fundamentals of instruction for teachers of aviation ground instruction courses.

420 Commercial Flight Course, Part IV (4)

Prereq: FAA written passed or perm. 40 hrs of flight instruction including 10 hrs in complex airplane. 3 lab. Course fee \$1,980.

430 Multi-Engine Flight Course (2)

Prereq: Pilot's certificate and perm. 12 hrs of procedures with both engines operative, with 1 engine inoperative (feathered), single

engine speeds, effects of airplane configuration on engine-out performance, enroute operations, single engine approaches and landings. 2 lab. Course fee \$1,630.

440 Flight Instructor Ground Instruction (4)

Prereq: commercial pilot's certificate or perm. 40 hrs ground instruction on FAA regulations and publications, weather, advanced flight computer operations, radio navigation, advanced aircraft and engine performance, and fundamentals of instructing. Covers requirements for flight instructor written exams. 2 lec.

445 Flight Instructor Course (3)

Prereq: commercial pilot's certificate and perm. 20 hrs review of commercial course with emphasis on how to instruct and analysis of maneuvers. 3 lab. Course fee \$920.

450 Instrument Instructor Ground Instruction (3)

Prereq: commercial certificate. 30 hrs review of instrument course with emphasis on how to instruct instrument flying. Covers requirements for instrument written exam. 2 lec.

455 Instrument Instructor Flight Course (3)

Prereq: commercial certificate. 20 hrs of review of instrument course with emphasis on how to instruct on instruments. 3 lab. Course fee \$910.

460 ATP Ground Instruction (4)

Prereq: FAR 61.153. 40 hrs advanced course placing major emphasis on specific requirements and duties of airline transport pilots in accordance with Federal Aviation Regulations. Provides aeronautical requirements for airline transport pilot written exam. 2 lec.

470 ATP Flight Course (2)

Prereq: perm. 15 hrs taking practical and operational approach to problems that arise in planning and conducting air transport operations. 3 lab. Course fee \$2,640.

475 Internship in Aviation Operations (1-15)

Prereq: perm. Internship program in selected fields of aviation under direction of faculty member. Specific fields could be: (1) serving as intern in commercial flight operation as copilot or as flight instructor; (2) serving as intern in airport operation as assistant to airport manager, or (3) special service flying such as medical supplies, fire-fighting, cloud seeding. FAA observers, etc.

BACTERIOLOGY

See Zoological and Biomedical Sciences.

BIOLOGY

See Botany or Zoological and Biomedical Sciences.

BLACK STUDIES

See Afro-American Studies.

BOTANY

For students interested in careers in botany, plant pathology, biotechnology, environmental biology, natural resources, conservation, forestry, field biology, agronomy, horticulture, plant breeding, landscaping, freshwater and marine biology, cell biology, or agri-business, the Department of Botany offers major programs in the following specializations: botany (major code 2111); preforestry (major code 2112); environmental biology-botany emphasis (major code 2113); applied plant sciences (major code 2114); field biology (major code 2115); advanced training in botany (major code 2116); agri-business (major code 2117); and

cell biology (major code 2118). For further information relating to these programs and suggested curricula, please see "Special Curricula" under the *College of Arts and Sciences* section in this catalog. The requirements for the botany major, both A.B. and B.S., are given below.

For a B.S. degree with a major in botany the student must complete a minimum of 50 credit hours in BOT courses including 110*, 111*, 404, and a minimum of two courses from each of the following three areas. Area a: 331 or 431, 424, 427. Area b: 309, 425, 426, 475. Area c: 307, 308, 310, 312, 420, 460. Additional courses to complete the 50 credit hour requirement may be selected from areas a, b, and c, or other BOT courses numbered above 200 listed in this catalog. The following non-departmental courses also are required: CHEM 141, 142, 143, 301, 302; ZOOL 151, 325; PHYS 201, 202, 203; MATH 163A, 163B; and one course from the following: MATH 250B, PSY 121, CS 220, CS 230, CS 322.

The A.B. degree in botany is designed for the student interested in the plant sciences but who desires a broad, liberal education. Many students may find that the flexibility in this program allows for either a minor or second major in another discipline such as economics, business administration, computer science, anthropology, sociology, geography, geological sciences, microbiology, zoology, etc. Students who plan to do graduate studies in botany or one of the related biological sciences should consult a departmental advisor for assistance in selecting a program that is designed for preparation for advanced degrees. For an A.B. degree with a major in botany the student must complete a minimum of 40 credit hours in BOT courses including 110*, 111*, and two courses from each of the following three areas. Area a: 331 or 431, 424, 427. Area b: 309, 425, 426, 475. Area c: 307, 308, 310, 312, 420, 460. The following non-departmental courses also are required: CHEM 121, 122, 123; ZOOL 151, 325; and either (select one from the following) MATH 163A, MATH 250B, MATH 263A, CS 220, CS 230, CS 322, or PSY 121.

In addition to major programs, the Department of Botany offers a minor. Requirements for the minor in botany consist of a minimum of 28 credit hours of coursework in botany, including BOT 110* and 111*, and at least two courses at the 300 level or above.

*Under special circumstances and only with the approval of the Department of Botany undergraduate advising coordinator, BOT 101 and 102 may be considered for substitution for BOT 110 and 111 respectively.

101 Principles of Biology (5) (2N)

For nonscience majors. Introduction to principles and concepts of life; interrelationships of structural, functional, reproductive, evolutionary, and ecological principles related to cells and organisms. (Same as ZOOL 101.) Credit not allowed for both 101 and 110 or for both 101 and ZOOL 150. 3 lec, 2 lab.

102 Plant Biology (5) (2N)

Prereq: 101 or ZOOL 101 suggested. For nonscience majors. Morphology and anatomy of seed plants as related to function. Survey of plant kingdom with emphasis on evolutionary relationships and life histories of selected plant groups. Credit not allowed for both 102 and 111. 3 lec, 2 lab.

103 Biology, Plants, and Man (4) (2N)

Interrelationships of plants and humans from both historical and modern points of view, origins of agriculture and civilization, tropical and temperate food plants, medicinal plants, drug plants, destruction of environment, and its ultimate effect on food plants. 3 lec, 1 disc.

110 Introduction to Botany (6) (2N)

J. Mitchell, staff. For botany and other science majors, preprofessional students, and science modular students. Introduction to fundamental biological principles as they affect plant science. Structure and function of cells and cell organelles, classical and molecular genetics, evolution and ecology. (Same as ZOOL 150.) Credit not allowed for both 101 and 110 or for both 110 and ZOOL 101. 4 lec, 4 lab.

111 Introduction to Botany (6) (2N)

Prereq: 110 or ZOOL 150 or perm. *J. Graffius.* For botany and other science majors, preprofessional students, and science modular students. Introduction to morphology, anatomy, life histories, and reproduction of vascular plants; survey of plant kingdom. Credit not allowed for both 102 and 111. 4 lec, 4 lab.

180 Woody Plants (4) (2N)

(full) Study of local woody plants as well as some representative nonwoody plants, with emphasis on structure, function, and de-

velopment of vegetative organs, and on ecological determinants of distribution. Introduction to use of keys in plant identification, and to principles of classification. Credit not allowed for both 180 and 248. 2 lec, 4 lab.

185 Spring Flora (4) (2N)

(spring) Study of spring-flowering plants, with emphasis on structure, function, and development of flowering organs, pollination biology, ecology, and adaptive significance of vegetative and reproductive features. Introduction to use of keys in plant identification, and to diagnostic characteristics of major flowering-plant families. Credit not allowed for both 185 and 309. 2 lec, 4 lab.

247 Vegetation of North America (4) (2N)

Prereq: 1 course biological science or perm. *W. Wistendahl*. Illustrated lecture course considering extensive plant formations with relationship to climate, soil, geographic formations, and influence of humans. 4 lec.

248 Trees and Shrubs (Dendrology) (5)

Prereq: 111 or 102. (fall) *P. Cantino*. Collection, identification, nomenclature, classification, ecological relationships, and importance to humans of native and introduced woody plants. Credit not allowed for both 180 and 248. 3 lec, 4 lab, supplementary field trips.

252 Basic Horticulture (4)

Prereq: 111 or, with perm, 102. (fall) Integration of principles of plant anatomy, morphology, physiology, and classification as they relate to growth responses and propagation of horticultural plants. 3 lec, 2 lab.

297T Botany Tutorial (1-15)

Prereq: Tutorial college and perm.

298T Botany Tutorial (1-15)

Prereq: Tutorial college and perm.

299T Botany Tutorial (1-15)

Prereq: Tutorial college and perm.

305 Plant Propagation (4)

Prereq: 252 or perm. *R. Rypma*. Principles and practices in sexual and asexual propagation of horticultural crops; time, manner, and material for cutting, budding, grafting, and layerage; methods of seed handling as affected by time, temperature, and media; study of types, construction, and management of propagation structures. Special techniques employed in propagation of economic cultivars, specialized plant parts, and treating plant organ and tissue culture. 2 lec, 4 lab.

307 Morphology of Algae and Bryophytes (6)

Prereq: 111 or 102. *J. Graffius*. Comparative studies of phylogenetic relationships, structural adaptations, and life histories of algae and bryophytes. 4 lec, 4 lab.

308 Morphology of Vascular Plants (6)

Prereq: 111 or, with perm, 102. *G. Rothwell*. Comparative studies of phylogenetic relationships, structural adaptations, and life cycles of fern allies, ferns, gymnosperms, and angiosperms. 4 lec, 4 lab.

309 Plant Systematics and Ohio Flora (5)

Prereq: 111 or 102. (spring) *R. Lloyd*, *P. Cantino*. Principles and methods of systematics and taxonomy: classification, floral biology, and evolution of flowering plants. Lab: identification and classification of spring flora. 3 lec, 6 lab, field trips.

310 Biology of Fungi (5)

Prereq: 111 or 102. *J. Cavender*. Morphology and life history studies of selected fungi of major groups; collection, isolation, and growth of selected fungi; fungal activities. 3 lec, 4 lab.

311 Biology and Human Affairs (4)

Prereq: 102. *Staff*. Discussions of impact of modern biological science upon human problems in biological, social, moral, and political areas. No credit toward major. 4 lec.

312 Plant Anatomy (5)

Prereq: 111 or, with perm, 102. *G. Rothwell*. Structure, development, and systematic anatomy of vascular plants. 3 lec, 4 lab.

313 Special Topics in Botany (1-6)

Prereq: perm. Current and/or special topics in botany.

313B Supervised Study (1-3)

Prereq: botany majors and perm.

313C Bioethics (4)

Prereq: jr or sr rank suggested. (fall) *L. Larson*. Discussions of contemporary bioethical issues in life sciences relating to genetics, birth control, behavior control, experimentation on human subjects, health care, death, dying, abortion, and general impact of science and technology on human values. 4 lec.

315 Horticultural Management and Techniques (2, max 8)

Prereq: 252 and jr or sr rank; prehorticulture emphasis. *R. Rypma*. Techniques for growing and culturing common horticultural plants; experience in planting, fertilization, watering, fumigation, and using special equipment and chemicals utilized in typical greenhouse operations. Maintenance of equipment used in greenhouse operations. 4 lab.

331 Plant Cytogenetics (3)

Prereq: 111 or 102. *J. Braselton*. Chromosomal theory of heredity; meiosis and mitosis; variations in chromosome numbers, structure, and behavior; genetic principles in relation to plant breeding. Credit not allowed for both 331 and 431. 3 lec.

352 Basic Hydroponics (4)

Prereq: Bot 252 or perm. *R. Rypma*. The art and science of growing crops without soil; advantages of different types of nutrient solutions; design, construction, and operation of hydroponic units. 2 lec, 4 lab.

368 Teaching of Biology (4)

Prereq: 18 hrs biological sciences. *L. Larson*. Discussion, demonstration, and practice of goals and skills in biological teaching. Written and verbal evaluation and criticism of journals, texts, and A-V programs. Analysis and criticism of lab experiments. 2 lec, 4 lab.

397T Botany Tutorial (1-15)

Prereq: Tutorial college and perm.

398T Botany Tutorial (1-15)

Prereq: Tutorial college and perm.

399T Botany Tutorial (1-15)

Prereq: Tutorial college and perm.

404 Undergraduate Research (2-6)

Prereq: 24 hrs botany and perm. Independent research under supervision of faculty member.

405 Discussions About Biology (2)

Prereq: 15-20 hrs botany and/or zoology. Discussions of experimental problems and approaches focusing on synthesis of ideas and principles in biological fields. 2 lec.

410 Plants and Soil (4)

Prereq: 111 or 102; 2 qtrs chemistry. *J. Cavender*. Soil as environment for plant growth; interrelationships between plant and soil; role of soil organisms in cyclic processes; building and maintenance of soil fertility; relationships between soil and health of plants, animals, and humans. 3 lec, 2 lab.

412 Plant Pathology (5)

Prereq: 310; jr or sr rank. *C. Miller*. Theory of pathogenesis; types of pathogens and plant diseases; significance of plant disease in nature and horticulture; plant disease control. 3 lec, 4 lab.

420 Fresh-Water Algae (5)

Prereq: 111 or, with perm, 102. *J. Graffius*. Taxonomy and ecology of fresh-water algae, with emphasis on identification and distribution of common or representative genera. 3 lec, 4 lab.

424 Plant Physiology (6)

Prereq: 111 or 102; organic chemistry recommended. (winter) *L. Larson*. Basic chemical and physical aspects of plant processes; photosynthesis, respiration, mineral nutrition, transport, nitrogen metabolism, water relations, and growth. 3 lec, 4 lab.

425 Plant Ecology (5)

Prereq: jr or sr rank. (fall) *I. Ungar*, *W. Wistendahl*. Effect of environmental factors as related to structure and function of plant communities. 3 lec, 4 lab, 1 Saturday field trip.

426 Physiological Plant Ecology (5)

Prereq: 425 or perm. (spring) *I. Ungar*, *W. Wistendahl*. Analysis

and interpretation of ecological problems. 3 lec, 4 lab, 1 Saturday field trip.

427 Molecular Genetics (3)

Prereq: 431 or ZOOL 325, organic chemistry, perm. *N. Cohn*. Genetic fine structure and function at the molecular level; biochemical aspects of heredity in microorganisms, plants, and animals; recombinant DNA and genetic engineering. Same as ZOOL 427. 3 lec.

431 Cell Biology (5)

Prereq: 10 hrs biological science, 1 yr chemistry, ZOOL 325 recommended. (winter) *J. Braselton*. Gross and fine structure of cells; mitosis; meiosis; morphology; and chemistry of nuclear and cytoplasmic constituents. Credit toward major not allowed for both 331 and 431. 3 lec, 4 lab.

432 Microtechnique (5)

Prereq: sr rank and perm. *J. Braselton*. Preparation of plant tissues for microscopic study. 6 lab.

460 Paleobotany (6)

Prereq: perm. *G. Rothwell*. Morphology and evolution of representative fossil plant groups. 3 lec, 6 lab.

475 Plant Speciation and Evolution (3)

Prereq: jr or sr majors in biological sciences. *R. Lloyd*. Principles of evolution and speciation of flowering plants and ferns with emphasis on nature of plant species, divergence, isolation, hybridization, and nature of genetic systems therein. 3 lec.

497T Botany Tutorial (1-15)

Prereq: Tutorial college and perm.

498T Botany Tutorial (1-15)

Prereq: Tutorial college and perm.

499T Botany Tutorial (1-15)

Prereq: Tutorial college and perm.

BUSINESS ADMINISTRATION

The general business major prepares professionals on a broad basis for a business career. Five upper-level courses are required from the following areas: disciplines: accounting, quantitative business analysis, management, business law, finance, marketing, production, business administration, and economics. Each such course will be in a different functional area and/or discipline. This major is of special interest to those students who have a generalized view of business and do not possess strong interests in any one concentration area.

101 Business and Its Environment (4)

Nature of business and of economic, social, and political environments of business firm. Emphasis on ways in which such surroundings affect business policies and operations.

111 History of American Business (4)

Origins and development of American business, emphasizing interrelations among business, economy, society, and polity.

310 Production Management (4)

Prereq: QBA 201 (or equivalent) and jr rank. Emphasis on organization of production function and its relationship to other management and functional activities. It is assumed that students have a background in economics, accounting, business law and statistics equivalent to ECON 101 & 102, ACCT 202, BUSL 255, and QBA 201.

411 Production Planning and Control (4)

Prereq: 310 and perm. Quantitative techniques used in premanufacturing and control phases of production function.

412 Production Management Problems (4)

Prereq: 310 and perm. Analysis of production management problems in various industries and technologies.

431 Administration of Information Systems (4)

Prereq: sr rank or perm. Information networks and flows in organizations within total systems framework.

445 Small Business Administration (4)

Prereq: BA 310; BUSL 255; FIN 325; MGT 300, 325J; MKT 301.

Place and role of small business firms; problems they face; opportunities involved and competitive considerations.

455 Studies in Business History (4)

Prereq: jr or sr rank and perm. Case studies of American businessmen and firms since early colonial period, with emphasis on 20th century. Lessons from past examined in relation to present sound business policy.

465 Technology and the Environment (4)

Prereq: jr or sr rank and perm. Course is conceptual, interdisciplinary, and future-oriented. Variety of developmental problems and interaction of many technological environments including economic, sociopolitical, and market environments.

470 Administrative Policy (4)

Prereq: CBA, sr rank and all CBA core courses. Integrated application of core studies to nature, functions, and activities of actual business, analyzing objectives, policies and performance — all in relation to outside environment.

480 Ethics and Morality in Business (4)

Prereq: jr or sr rank and perm. Combined moral philosophy and personal responsibilities in business; critical analysis of contextual situation where provisional resolutions must be indirectly charted between ethical oughts and economic musts.

485 Multinational Business (4)

Prereq: perm. Study of emergence of U.S. and non-U.S. multinational corporations, scope of their operations, and their impact on U.S. economy and consumer.

497 Independent Research (1-4)

Prereq: perm. Research in selected fields of business administration under direction of faculty member.

498 Internship (1-4)

Prereq: perm.

BUSINESS LAW

255 Law and Society (4)

(2S)

Prereq: soph rank. Conceptual approach to origin, nature, structure, functions, and procedures of law with study of contractual relationships. Administrative and governmental process with attention given to antitrust and role of government and consumer interests in our legal system.

356 Law of the Management Process (4)

Prereq: 255 and jr rank. Conceptual framework of legal nature of organizations, particularly corporations and partnerships; rights, powers, and limits of managers in relation to duties and responsibilities to their organizations, owners, creditors, employees, customers, state, and public.

357 Law of Commercial Transactions (4)

Prereq: 255 and jr rank. Legal aspects of commercial paper, consumer credit, and bankruptcy.

360 Law of Health Care (4)

Prereq: jr rank or perm. Analysis of public-private constraints in foundation health agencies; experimentation and risk assumption; medical records; hospital liability; governmental regulations.

370 Environmental Law (4)

Prereq: jr rank or perm. Legal aspects of both individual environmental and societal environmental rights and duties with respect to constitution, private property, nuisance, negligence, statutes, regulatory agencies, and court decisions. Emphasis upon case study of federal, state, and local laws which shaped existing law and those which are likely to shape future legislative and administrative action.

442 Law of Property and Real Estate (4)

Prereq: 255 or perm. Property law as an institution and analysis of creation, transfer, and relation of various legal interests in property, especially land.

462 Law of Estates and Trusts (4)

Prereq: 255 or perm. Law as it pertains to decedents' estates including law of wills, intestate succession, and trusts.

465 Law of Sports (4)

Prereq: perm. Regulations of amateur athletics, public regulation of sports activities, legal relationships in professional sports, enforcement of professional sports contract, liability for injuries, and antitrust aspects of sports activities.

475 Government and Business (4)

Prereq: 255 or perm. Governmental regulatory environment of business including analysis of statutes, court decisions, and rulings affecting policy decisions.

491 Seminar (3, 4, or 5)

Prereq: 255 or perm. Selected topics of current interest in business law area.

493 Readings (1-5)

Prereq: perm. Readings in selected fields of business law. Topics selected by students in consultation with faculty member.

497 Independent Research (1-5)

Prereq: perm. Research in selected fields of business law under direction of faculty member.

BUSINESS MANAGEMENT TECHNOLOGY

The following courses for the A.A.B. degree program in business management technology are available only on the Chillicothe campus. These courses are not open to College of Business Administration students.

110 Introduction to Management (4)

Nature of managerial concepts, managerial functions, and organizational structure, with emphasis on current issues.

130 Business Machine Computation (3)

Application of mathematical procedures to typical accounting, financial, and other business problems. Includes study of essentials of business arithmetic; simple, periodic, and compound interest; values; payrolls; commission; pricing; and accounting mathematics.

140 Concepts of Marketing (4)

Introduction to problems of manufacturers, wholesalers, and retailers as they relate to modern marketing, market, and product.

150 Elements of Supervision (3)

Concepts of modern-day supervision. Emphasis on supervisor's major functions and development of sensitivity to human facets in management, using behavioral science findings.

189 Independent Study (1-5)

Projects concerning business technology explored with instructor on 1-to-1 basis. Studies selected in subject areas in business field. May be repeated up to 5 credit hrs.

203 Business Career Profiles (3)

Practical approach to better understanding by students of what is expected of them by management and what they can expect from management on any job or in any working situation.

210 Managing Finance in Business (4)

Introduction to basic concepts, principles, and analytical techniques of financing. Emphasis on planning and managing assets.

220 Concepts of Purchasing Management (4)

Analysis of purchasing operation's structure and procedure. Descriptions of quality, quantity, value analysis, sources of supply, and procurement controls. Vendor/buyer relationships, make-or-buy decisions, inventory control, buyer training, materials handling, records, and budgets.

230 Concepts of Sales (3)

Policies and procedures pertaining to production planning, pricing, choice of market, planning sales effort, and control of sales operations. Personality development and role of selling in society, careers, and psychology and philosophy as related to selling.

240 Concepts of Audience Analysis (3)

Development of knowledge of behavior content of marketing in consumer fields. Examination of applicable theory and research findings and concepts provided by psychology, sociology, an-

thropology, and marketing. Stress on conceptual models of buyer behavior based on sources of influence.

250 Practical Personnel Procedures (3)

Hiring, training, assignment of work, employee counseling, promotion, wage and salary administration. Leadership, motivation, and direction of employees toward management/employee-oriented goals.

260 Business Report Writing (4)

Practice in planning and writing effective business letters, memoranda, and reports.

270 Advertising Concepts (3)

General course in advertising which emphasizes psychology, advertising agency, media research, brands, and labels.

275 Managerial Planning (4)

Applications of planning and forecasting techniques to business situations. Computer-assisted techniques used to analyze cases and problems.

280 Concepts of Labor and Management Relations (4)

Analysis of bargaining requirements and methods, agreement development and administration, and trends in collective bargaining.

285 Government and Business (3)

Business and government relations, with emphasis on analysis of selected areas involving public policy and business.

289 Special Topics (1-5)

Advanced projects concerning business technology explored with instructor on 1-to-1 basis. For advanced students only. May be repeated to 5 credit hrs.

CHEMISTRY

A student who completes the requirements for the B.S. degree with a major in chemistry is eligible for professional status in the American Chemical Society in the minimum period of two years of professional experience after graduation. Completion of the minimum requirements for the A.B. degree with a major in chemistry does not qualify a student for certification to the society.

Students who wish to obtain state certification to teach high school chemistry *may* do so by completing the A.B. or B.S. degree programs, described in the following sections. To do so also requires completion of professional education and general education courses, as described in the *College of Education* section of this bulletin. Students pursuing this option not only need to maintain contact with their Chemistry Department advisors, but also need to obtain further information concerning certification requirements from the College of Education, Room 124, McCracken Hall. Students may also attain certification to teach high school chemistry through B.S.Ed. programs with a major or minor in chemistry as described in the *College of Education* section of this bulletin.

Students having foreign language requirements should take German or Russian. Those anticipating graduate study should be aware that graduate schools generally require a reading knowledge of one or more foreign languages; German and/or Russian is recommended. Details of the M.S. and Ph.D. programs are given in the Graduate Bulletin.

All chemistry laboratory courses will require a \$10 breakage card, the unused portion of which will be refunded.

Completion of the A.B. or B.S. degree requirements automatically completes the requirement of the College of Arts and Sciences for at least nine hours in the major at the junior-senior level.

Chemistry Major

(Major Code #3311)

The major requirement for the B.S. degree includes the following: 141-142-143, 305-306-307, 308-309, 400, 453-454-455, 456-457, 476, 484-485, a course in biochemistry (489 or the full sequence 490-491-492), and three additional hours (other than 499) above 400. Extradepartmental requirements include MATH 263A-B-C and PHYS 251-252-253, which should be completed by the end of

the second year. ENG 151 and 305 are also required. The B.S. degree program is chosen by students contemplating entrance into graduate programs in chemistry or employment in the chemical industry.

The major requirement for the A.B. degree includes the following: 141-142-143, 301-302 or 305-306-307, 303-304 or 308-309, 325 or 484-485, 351 or 453-454-455, 476, and a course in biochemistry. A full year's work is required in at least one of the following fields: analytical (143-484-485), organic (305-306-307), physical (453-454-455), or biochemistry (490-491-492). ENG 151 and 305 are also required.

B.S. in Forensic Chemistry

(Major Code #3310)

The B.S. degree in forensic chemistry is a four-year program. Forensic chemistry is the application of chemistry and related sciences to criminal investigation. The program prepares students to work in modern crime laboratories or other law enforcement agencies such as FDA, OSHA, and EPA or to pursue graduate work in forensic chemistry or forensic sciences.

The major requirements for the degree include CHEM 141, 142, 143, 301, 302, 303, 304, 351, 460, 483, 484, 485, 487, and one course to be selected from CHEM 330, 400, 476, 479, 489, 490, and 499. Extradepartmental requirements are ART 191; ENG 151 and 305; LET 100, 120, 140, 200, 250, and 260; MATH 163A and 163B; PHYS 201, 202, and 203; and ZOOL 150, 300, and 364.

Students interested in the program should consult the Director, Forensic Chemistry Program, Chemistry Department, for advance advising and schedule planning.

B.S. in Industrial Hygiene

(Major Code #3309)

Consult the Index under "Industrial Hygiene, Courses in" to locate the description of this program.

115 Preparation for College Chemistry (2)

Prereq: fr only, or perm. (spring) For students who have not had high school chemistry or have had inadequate preparation to enter regular chemistry sequence. Material presented includes metric system, atomic and molecular structure, formulas, equations, states of matter, and problem solving. Will not satisfy any part of natural science requirement of College of Arts and Sciences. 2 lec.

121 Principles of Chemistry I (4) (2N)

(fall) Introduction to chemistry through study of atomic and molecular structure, periodic table, and states of matter. Recommended for students in College of Engineering and Technology (except chemical and mechanical engineers), College of Education (except B.S.Ed. majors in biological science, chemistry, and physics), and other programs requiring only 1 yr of chemistry. Credit not allowed for both 121 and 141. 3 lec, 3 lab.

122 Principles of Chemistry II (4) (2N)

Prereq: 121 or perm. (winter) Introduction to descriptive inorganic chemistry through study of solutions and concept of equilibrium. Credit not allowed for both 122 and 142. 3 lec, 3 lab.

123 Principles of Chemistry III (4) (2N)

Prereq: 122 or 142 or perm. (spring) Designed to survey organic chemistry and biochemistry and their impact upon daily existence. 3 lec, 3 lab.

141 Fundamentals of Chemistry I (5) (2N)

(fall, winter, summer) General course in fundamental chemical principles. Atomic structure, periodic classification, bonding, mole concept, and stoichiometry with problem solving. Recommended for majors in chemistry, chemical engineering, mechanical engineering, botany, zoology, medical technology, secondary education (B.S.Ed. in biological sciences, chemistry, and physics), and preprofessional (biological science) areas. Credit not allowed for both 121 and 141. 4 lec, 3 lab.

142 Fundamentals of Chemistry II (5) (2N)

Prereq: 141 or perm. (winter, spring, summer) Introduction to

thermodynamics and chemical equilibrium through study of solutions with problem solving. Credit not allowed for both 122 and 142. 4 lec, 3 lab.

143 Quantitative Analysis (5) (2N)

Prereq: 142 or perm. (spring, fall) Introduction to quantitative techniques to include volumetric and gravimetric methods of analysis. 3 lec, 1 recit, 3 lab.

301 Organic Chemistry (3)

Prereq: 123 or 143 or with 143 or perm. (fall, summer) Designed for students who are not B.S. chemistry majors and who do not require a full-year course in organic chemistry.

302 Organic Chemistry (3)

Prereq: 301. (winter, summer) Continuation of 301. See 301 for description.

303 Organic Chemistry Laboratory (2)

Prereq: 301 or 305, or with 301. (fall, spring, summer) Designed for students who are not B.S. chemistry majors. 1 lec, 2 lab.

304 Organic Chemistry Laboratory (3)

Prereq: 303 and 302 or with 302. (winter, summer) Continuation of 303. See 303 for description. 6 lab.

305 Organic Chemistry (3)

Prereq: 143 or with 143 or perm. (fall) Organic chemistry for chemistry majors and other students wishing to acquire sound knowledge of classical and modern organic chemistry.

306 Organic Chemistry (3)

Prereq: 305. (winter) Continuation of 305. See 305 for description.

307 Organic Chemistry (3)

Prereq: 306. (spring) Continuation of 305-306. See 305 for description.

308 Organic Chemistry Laboratory (3)

Prereq: 306, or with 306. (winter) Synthesis, purification, and characterization of organic compounds. 6 lab.

309 Organic Chemistry Laboratory (3)

Prereq: 308 and 307 or with 307. (spring) Continuation of 308. See 308 for description.

325 Instrumental Methods of Analysis (4)

Prereq: 143. (winter) Analytical chemistry course for students not majoring in chemistry, which emphasizes application of instrumental methods to solution of problems in chemical analysis. 3 lec, 3 lab.

330 Introduction to Toxicology (4)

Prereq: 302 or 307. Introduction to chemical, clinical, environmental, and forensic aspects of toxicology, types of poisons, how poisons act, treatment of acute poisoning, and control of poisonous materials.

345 Chemistry of Photography (4)

Prereq: 122 or 142 and ART 207. Basic chemistry of modern and historical photographic and photomechanical materials and processes. 2 lec, 4 lab.

351 Physical Chemistry (4)

Prereq: MATH 263B or perm. (fall) For premedicine, B.S.Ed., B.S.I.H., and A.B. chemistry majors. Topics include thermodynamics, thermochemistry, equilibrium, solutions, electrochemistry, and kinetics, with special emphasis on applications in life sciences.

400 Advanced Organic Chemistry (3)

Prereq: 307, 309. (fall, spring) Advanced lab techniques and instrumentation. 6 lab.

410 Emergence of a Science (4) (3S)

Prereq: Senior standing with one year of university level science. (spring) Designed for students interested in historical and philosophical influences that led to present concept of chemistry as science. Chronological survey of developments from antiquity to present, with discussions of philosophers of science from Thales to Russell. Not acceptable for 400-level requirement in B.S. chemistry degree program.

420 Chemical Literature (3)

Prereq: 24 hrs, reading knowledge of German. Instruction in use of chemical literature and application to scientific writing.

450 Principles of Quantum Chemistry (3)

Prereq: MATH 263C or perm. (winter) Introduction to solution of problems concerning molecular structure and spectroscopy in terms of quantum theory.

453 Physical Chemistry (3)

Prereq: 143, MATH 263C, PHYS 253. (fall) Calculus-based study of thermodynamics with applications to chemical equilibria.

454 Physical Chemistry (3)

Prereq: 453. (winter) Continuation of 453. Thermodynamics of ionic solutions, electrochemical cells, and surfaces. Kinetic theory of gases. Chemical kinetics.

455 Physical Chemistry (3)

Prereq: 454. (spring) Continuation of 454. Quantum theory with applications to molecular structure, molecular and resonance spectroscopy including nmr and esr, statistical thermodynamics.

456 Physical Chemistry Laboratory (3)

Prereq: 351 or 453. Experimental determination of molecular weights, ionic velocities, composition of azeotropes and complex ions, equilibrium constants, phase rule diagrams, etc. Instrumental procedures include refractometry, polarimetry, viscometry, etc. 6 lab.

457 Physical Chemistry Laboratory (3)

Prereq: 456. Continuation of 456. 6 lab.

458 Chemical Thermodynamics (3)

Prereq: 455. (spring) Concepts of energy and entropy and their use in predicting feasibility and extent of chemical reactions.

460 Spectroscopic Methods in Organic Chemistry (3)

Prereq: 307, 455. (spring) Modern spectroscopic methods as employed in organic chemical research: NMR, IR, UV, ESR, and mass spectrometry.

471 The Physical Chemistry of Macromolecules (3)

Prereq: 454. Effects of structure and molecular weight on physical and chemical properties of macromolecules. Topics include molecular weight distribution, solubility, polymer conformation, different types of polymers, synthesis and reactions. Both synthetic and natural polymers considered.

476 Modern Inorganic Chemistry (4)

Prereq: 351 or 453 or with 351 or 453. (fall) Considers relationship between physical and chemical properties of inorganic substances and nature of bonding and structures involved. 4 lec.

477 Synthetic Methods of Inorganic Chemistry (2-3)

Prereq: 476. Theoretical principles and practices of synthesis, purification, and characterization of inorganic substances. 1 lec, 3-6 lab.

479 Radiochemistry (4)

Prereq: 143 or perm. Applications of isotopes to problems in chemistry; safe handling of radioactive material; detection and determination of radiation. 2 lec, 4 lab.

480 Advanced Organic Chemistry (4)

Prereq: perm. (fall) Structural theory, stereochemistry, reactive intermediates, and reaction mechanisms.

483 Chemical Separation Methods (4)

Prereq: 143. (winter) Modern methods of separating components of complex mixtures with emphasis on operation and application to analytical chemistry. Topics include liquid-liquid extractions, partition chromatography, ion-exchange, gas-chromatography, high pressure liquid chromatography, exclusion chromatography, and electrophoresis. 3 lec, 3 lab.

484 Electrochemical Methods of Analysis (6)

Prereq: 351 or 453. (spring) Modern electrochemical techniques and instrumentation with emphasis on their applications in analytical chemistry. Topics include introduction to electronic circuits and operational amplifiers, potentiometry, specific ion electrodes, DC and AC polarography, pulse polarography, coulometry, chrono-coulometry, cyclic voltammetry, rapid scan voltammetry. 3 lec, 6 lab.

485 Spectrochemical Analysis (6)

Prereq: 351 or 453. (fall) Survey of spectrochemical instrumentation with emphasis on their operation and application in analytical chemistry. Topics include atomic absorption, atomic emission, molecular absorption and molecular emission and will cover

emission-absorption phenomena in the X-ray, ultraviolet, visible, and infrared regions of electromagnetic spectrum. 3 lec, 6 lab.

487 Forensic Chemistry (4)

Prereq: 485. Surveys chemical problems most frequently encountered in crime lab and their currently acceptable solutions, as well as special techniques not covered in other analytical chemistry courses. 3 lec, 3 lab.

488 Chemical Instrumentation (4)

Prereq: 455. Fundamentals of electronics emphasizing circuitry in modern chemical instruments. 3 lec, 3 lab.

489 Basic Biochemistry (4)

Prereq: 302 or 307 or perm. (spring) Survey course, including introduction to biochemical concepts and techniques, metabolic pathways, and information storage and transmission, with emphasis on directions of current biochemical research.

489L Biochemistry Laboratory (2)

Prereq: with or following 489 or 491 or perm. (winter) Modern biochemical lab techniques including chromatography, electrophoresis, measurement of enzyme kinetics and oxidative phosphorylation, amino acid analysis, and calorimetry. 4 lab.

490 Introduction to Biochemistry (3)

Prereq: 302 or 307. (fall) Macromolecular structure of biomolecules.

491 Introduction to Biochemistry (3)

Prereq: 490. (winter) Bioenergetics, metabolism, and metabolic control systems.

492 Introduction to Biochemistry (3)

Prereq: 491. (spring) Complex integrated biochemical systems.

497 Forensic Chemistry Internship (3-10)

Prereq: sr rank in Forensic Chemistry Program and perm. Supervised work in approved forensic science lab to gain practical experience. Oral and written reports required.

499 Undergraduate Research (1-5)

Prereq: jr or sr rank with 2.75 gpa in chemistry courses and perm of dept chairperson. Independent work for qualified upperclass majors in chemistry and related areas. Student may enroll one or more quarters.

CHINESE

See Foreign Languages and Literatures.

COMMUNICATION MANAGEMENT

The major requirements for the bachelor of science in communication management include 24 hours in the subject area, as well as courses in several other participating schools and departments (See Curricula and Requirements). All majors must take COMT 100, 270, 370, 462, and 470. Nonmajors must complete COMT 100 before taking any other course in communication management.

100 Introduction to Communication Management (4)

General principles and techniques of point-to-point telecommunications in private and public settings. Includes brief history of field and general introduction to systems employed (telephone, facsimile, computer, etc.).

270 Management of Data and Voice Networks (4)

Prereq: 100. Principles of designing and operating basic data and voice networks for business, government, and telephone companies. Includes traffic studies, queuing techniques, use of Erlang tables.

370 Economic and Regulatory Considerations in Communication Management (4)

Prereq: 100. Study of legal and regulatory trends as well as costs of telecommunications systems. How movement of information across state and international lines is controlled. Application of cost/benefit analyses.

462 Internship in Communication Management (4)

Prereq: 100, jr/sr rank, and perm. Conference course for students who have completed internship with an approved company, agency, or organization. Comprehensive analytical report required.

470 Management of Communication Resources (4)

Prereq: 100, 270, 370. A case study approach to problem-solving in the field. Emphasis will be on how actual communication managers do their jobs. Extensive problem paper required.

490 Special Studies in Communication Management (1-4, variable)

Prereq: 100 and approved written proposal. In-depth studies of specialized aspects of the field, supervised by a sponsoring faculty member. Repeatable up to 12 hours.

COMPARATIVE ARTS

Offerings include courses in introduction to fine arts and history courses in individual content areas.

The following two courses are provided for majors in the College of Fine Arts who wish to study the relationship of all the arts, and for all students in the University who wish to elect courses with the basic purpose of understanding their cultural heritage: CA 117 and CA 118 include four quarter hours of credit for each quarter for a total of eight quarter hours.

The courses service the following areas:

1. Tier II requirements for majors in the College of Fine Arts;
2. Tier II requirements for students in other degree colleges and for transfer students from other universities; and
3. State requirements for certification in the College of Education.

117 Introduction to Fine Arts (4) (2H)

Prereq: open to freshmen. Introduction to study of esthetic experience and investigation of concepts of response to that experience as seen from analysis of individual works of art. Examples drawn from media of painting and sculpture, architecture, theater, music, dance, and film.

118 Introduction to Fine Arts (4) (2H)

Prereq: 117. Analysis of form, media, and content of major arts stressing interrelationship among arts through recognition of common art factors.

211 History of Art (4) (2H)

General survey of western sculpture, painting, and architecture from prehistoric times to Early Christian and Byzantine.

212 History of Art (4) (2H)

Continuation of 211, beginning with Migration Period of Europe (4th century A.D.) and proceeding to 16th century A.D.

213 History of Art (4) (2H)

Conclusion of survey sequence, continuing with developments of 17th-century Europe to present.

270 History of Theater I (3)

Development of theater and drama in western world. 270: prehistoric, Greek, and Roman periods; 271: Medieval and Renaissance; 272: from Renaissance to modern. 3 lec.

271 History of Theater II (3)

Prereq: 270. Continuation of 270. See 270 for description.

272 History of Theater III (3)

Prereq: 271. Continuation of 270 and 271. See 270 for description.

317 Introduction to Fine Arts (4) (2H)

Prereq: not open to fr. Analysis of form, media, and content of major arts stressing interrelationships of architecture, dance, dramatic art, music, literature, and painting through recognition of common art factors.

318 Introduction to Fine Arts (4) (2H)

Prereq: 317, not open to fr. Analysis of form, media, and content of major arts stressing interrelationships of architecture, dance, dramatic art, music, literature, and painting through recognition of common art factors.

320X Fine Arts — Florence (1-6)

Prereq: enrollment in OU Italy Program. (spring) Study of fine arts as seen and performed in city of Florence. Churches, museums, and galleries, along with theatrical and musical events provide examples for study.

321 History and Literature of Music (3)

Prereq: MUS 103. *R. Wetzel*. History of music with survey of musical literature to 1450.

322 History and Literature of Music (3)

Prereq: 321 or MUS 321. *R. Wetzel*. History of music with survey of musical literature, 1450-1720.

323 History and Literature of Music (3)

Prereq: 322 or MUS 322. *R. Wetzel*. History of music with survey of musical literature, 1720 to present.

327 Cultural Traditions and the Arts (4)

(fall) Principal styles of western art as mirrored in selected masterpieces of architecture, sculpture, painting, music, and literature. Specific works of art examined in relationship to one another and against background of ideas that animated life of their times. (Greek, Roman, Medieval)

328 Cultural Traditions and the Arts (4)

(winter) Principal styles of western art as mirrored in selected masterpieces of architecture, sculpture, painting, music, and literature. Specific works of art examined in relationship to one another and against background of ideas that animated life of their times. (Renaissance, Baroque)

329 Cultural Traditions and the Arts (4)

(spring) Principal styles of western art as mirrored in selected masterpieces of architecture, sculpture, painting, music, and literature. Specific works of art examined in relationship to one another and against background of ideas that animated life of their times. (19th & 20th centuries)

350 Principles of Architecture (4)

Introduction to styles, theories, and structural principles of architecture.

351 Ancient Architecture (4)

Survey of architectural monuments and their historic settings in Near East, Egypt, Greece, and Rome.

352 Medieval Architecture (4)

Survey of architectural monuments and their historical setting in Early Christian, Byzantine, Romanesque, and Gothic periods.

353 Renaissance and Baroque Architecture (4)

Survey of architects and monuments from 15th through 18th century.

354 19th and 20th Century Architecture (4)

Survey of architects and monuments from historical revival styles through latest stylistic trends.

360J Writing in the Arts (4) (1J)

Prereq: 117, 118; major in fine arts; perm. Critical analyses of form, media, and content in fine arts stressing instruction in critical writing.

400 Senior Seminar: Comparative Arts (3)

Prereq: fine arts srs or perm. Designed to increase insight of art majors into all fine arts. Specifically, to understand similarities and differences which exist among several arts through consideration of basic esthetic concerns.

419 Great Masterworks (4)

Life, times, and works of at least 2 major artists within specified cultural period.

470 Greek Theater and Drama (4)

(fall, odd academic years) Drama, theater, and audience in ancient Greece. 4 lec.

471 Roman and Medieval Theater (4)

(winter, odd academic years) Intensive study of drama and theater of Roman and Medieval Europe. 4 lec.

472 Renaissance Theater and Drama (4)

(spring, odd academic years) Development of European theater and drama in Renaissance. 4 lec.

- 473 Restoration and 18th Century Theater (4)**
(spring, odd academic years) Drama, theater, and audience in England from Restoration through 18th century. 4 lec.
- 474 Baroque European Theater (4)**
(fall, even academic years) Detailed study of theater and drama of Europe in Baroque period. 4 lec.
- 475 19th Century European Theater (4)**
(winter, even academic years) Major developments in drama and theater in Europe during 19th century. 4 lec.
- 476 Contemporary Theater (4)**
(spring, even academic years) Trends and developments in 20th-century theater. 4 lec.
- 477A American Theater and Drama, 18th and 19th Century (3)**
Prereq: jr or sr. (fall) Beginnings and development of American theater and drama from 1700 to 1900.
- 477B American Theater and Drama: 1900-1945 (3)**
Prereq: jr or sr. (winter) New theater movement and drama in U.S. up to WW II.
- 477C American Theater and Drama: 1945-Present (3)**
Prereq: jr or sr. (spring) Theater and drama in U.S. from WW II to present.
- 481 Individual Problems (1-6)**
Prereq: open to srs only; perm.

COMPUTER SCIENCE

The requirements for a major in computer science are the completion of the core courses, a two-quarter calculus sequence, and two elective courses, each with a grade of C or better.

CS 230, 231, 238, 300, 320, 340, 361, 442, 456, and 462 constitute the core. Electives may be selected from CS courses at the 400 level and CSB 330 and 435, excluding seminars.

A minor in computer science may be earned by successfully completing CS 230, 231, 238, 300, 320, 340, 361 and one quarter of calculus, each with a grade of C or better. Prerequisites for computer science courses must be completed with a grade of C or better.

- 120 Computer Science Survey (5)**
Prereq: MATH 101 or equiv. Digital computer machine, its components, operation, control, history, and use. Particular emphasis placed on developing influence of digital computer in business, science, and humanities. Automation examined. BASIC language taught. Not open to those with credit for CSB 200.
- 220 Introduction to Computing (5) (1M)**
Prereq: MATH 113 or equiv. Algorithms, programs, and computers. Basic programming and program structure. Programming and computing systems. Debugging and verification of programs. Data representation. Organization and characteristics of computers. Survey of computers, languages, systems, and applications. Computer solution of several numerical and nonnumerical problems using 1 or more programming languages. Not open to those with credit for CS 321, 322, ET 240, or CSB 420. FORTRAN taught.
- 223 Introduction to Computing for Business (5)**
Prereq: MATH 113 or equiv. Principles and practice of computer solution of problems in business. Typical problems exist in accounting, quantitative methods, and management. COBOL is used.
- 230 Computer Programming I (5)**
Prereq: grade of C or better in MATH 113 or 117, or equiv. Basic programming and program structure. Programming and computing systems. Debugging and verification of programs. Data representation. Organization and characteristics of computers. Survey of computers, languages, systems, and applications. Computer solution of several numerical and nonnumerical problems using 1 or more programming languages. PASCAL taught.
- 231 Computer Programming II (5)**
Prereq: grade of C or better in 230. Continuation of CS 230. Introduction to intermediate programming techniques (e.g. recursion,

use of pointer variables, backtracking) and data structures. Definitions and specifications of syntax and semantics of programming languages. Continued use of structured language in CS 230 with examples chosen from nonnumerical problems.

- 238 Introduction to Computer Systems (5)**
Prereq: grade of C or better in 231. Computer structure, machine language, instruction execution, addressing techniques, and digital representation of data. Computer systems organization, logic design, microprogramming, and interpreters. Symbolic coding and assembly systems, macro definition and generation, and program segmentation and linkage. Systems and utility programs, programming techniques, and recent developments in computing. Several computer projects to illustrate basic machine structure and programming techniques.
- 300 Introduction to Discrete Structures (5)**
Prereq: 238 or equiv and MATH 163A or 263A. Review of set algebra including mappings and relations. Algebraic structures including semigroups and groups. Elements of theory of directed and undirected graphs. Boolean algebra and propositional logic. Applications of these structures to various areas of computer science.
- 320 Organization of Programming Languages (5)**
Prereq: 238 or equiv and MATH 163A or 263A. Formal definition of programming languages including specification of syntax and semantics. Simple statements including precedence, infix, prefix, and postfix notation. Global properties of algorithmic languages including scope of declarations, storage allocation, grouping of statements, binding time of constituents, subroutines, coroutines, and tasks. List processing, string manipulation, data description, and simulation languages. Run-time representation of program and data structures.
- 321 Computing for Engineers and Scientists (5)**
Prereq: MATH 340. Principles and practice of computer solution of problems involving extensive numerical calculations as found in physical sciences, engineering, and numerical mathematics. Not open to those with credit for CS 220, CS 322, ET 240, or CSB 420.
- 322 Computing with Statistical Packages (5)**
Prereq: soph rank and statistics course. Approximately half of course devoted to programming solutions to problems using FORTRAN, PASCAL, or PL/I. Emphasis on problem analysis, syntax, testing, and debugging of computer solutions to problems. Second half devoted to study of use of statistics packages such as SPSS for solution of statistical problems encountered in study of social, biological, and educational sciences. Not open to those with credit for CS 220, CS 321, ET 240, or CSB 420.
- 340 Introduction to Computer Organization (5)**
Prereq: 238 or equiv and MATH 163A or MATH 263A. Organization of digital computer. Data representation and internal transfer. Digital arithmetic logic unit, control section, and timing. Input-output devices and channels. Software - hardware interfaces.
- 361 Data Structures (5)**
Prereq: 300 or equiv. Basic concepts of data. Linear lists, strings, arrays, and orthogonal lists. Representation of trees and graphs. Storage systems and structures and storage allocation and collection. Multilinked structures. Symbol tables and searching techniques. Formal specification of data structures, data structures in programming languages, and generalized data management systems.
- 404 Design and Analysis of Algorithms (5)**
Prereq: 361. Correctness of algorithms. Analysis of efficiency of algorithms — recurrence relations, worst-case and best-case behavior, average-case behavior. Design of algorithms: divide-and-conquer and balancing, greedy method, graph searching, dynamic programming, backtracking, branch-and-bound and preprocessing techniques.
- 406 Computation Theory (5)**
Prereq: 300 and PHIL 320. Algorithms, recursive functions, Turing machines, decidability. (Same as PHIL 422.)
- 410 Formal Languages and Syntactic Analysis (5)**
Prereq: 361. Definition of formal grammars; arithmetic expressions and precedence grammars, context-free and finite-state grammars. Algorithms for syntactic analysis; recognizers, backtracking, operator precedence techniques. Semantics of grammar

ical constructs: reductive grammars. Floyd productions, simple syntactical compilation. Relationship between formal languages and automata.

442 Operating Systems and Computer Architecture I (5)

Prereq: 340 and MATH 163B or 263B. Review of batch process systems programs, their components, operating characteristics, user services, and their limitations. Implementation techniques for parallel processing of input/output and interrupt handling. Overall structure of multiprogramming systems on multiprocessor hardware configurations. Details on addressing techniques, core management, system accounting, and other user-related services. Traffic control interprocess communication, design of system modules, and interfaces. System updating, documentation, and operation.

444 Data Communications (5)

Prereq: 442; perm or course in assembly language. Introduction to theory and methodology of computer-to-terminal and computer-to-computer communications using telecommunications facilities. Following topics considered: a) development of data transmission techniques for use on existing telephone network; b) standards and protocols for orderly control of data links between processors; c) software for support of data transmission.

451 Modeling and Analysis of Computer Systems I (5)

Prereq: 442 and MATH 450B. Computer systems characterized by hardware, software, and operating environment. Models of portions or functions of batch, time-sharing, or real-time computer systems developed and analyzed. Simulation, queuing, scheduling methods and probability, and statistics used as tools.

452 Modeling and Analysis of Computer Systems II (5)

Prereq: 451. Continuation of 451.

456 Software Design and Development (5)

Prereq: 320, 361 and MATH 163B or 263B. Review of program language structures, translation, loading, execution, and storage allocation. Compilation of simple expressions and statements. Organization of compiler including compile-time and run-time symbol tables, lexical scan, syntax scan, object code generation, error diagnostics, object code optimization techniques, and overall design.

458 Operating Systems and Computer Architecture II (5)

Prereq: 442. Continuation of 442. Assembler language programming of system control functions: interrupt handling, virtual storage management, multiprocessing, clocks, CPU/channel states. PDP 11, IBM/370 or multi-user microcomputer systems studied.

462 Files and Data Bases (5)

Prereq: 361 and MATH 163B or MATH 263B. Continuation of 361, covering file structures and data bases. Random, indexed sequential, inverted, and multilist file structures; concepts of data models, data language, data security, and data integrity. Organization, storage, search, and retrieval methods of hierarchical, network, and relational data models discussed.

464 Information Organization and Retrieval (5)

Prereq: 462. Structure of semiformal languages and models for representation of structured information. Aspects of natural language processing on digital computers. Analysis of information content by statistical, syntactic, and logical methods. Search and matching techniques. Automatic retrieval systems, question-answering systems. Production of secondary outputs. Evaluation of retrieval effectiveness.

468 Data Base Design (5)

Prereq: 462 and 442. Continuation of 462. Objectives and architecture of generalized database management system (GDBMS). Models of GDBMS' hierarchical, network and relational. Data definition and data manipulation in GDBMS. File organization in GDBMS. External sorting of large databases. Survey of some commercial GDBMS. Additional selected topics.

480 Artificial Intelligence (5)

Prereq: 320 and 361. Definition of heuristic versus algorithmic methods, rationale of heuristic approach, description of cognitive processes, and approaches to mathematical invention. Objectives of work in artificial intelligence, simulation of cognitive behavior, and self-organizing systems. Heuristic programming techniques including use of list processing languages. Survey of examples from representative application areas. Mind-brain problem and nature of intelligence. Class and individual projects to illustrate basic concepts.

481 Information Organization and Retrieval Projects (1-15)

Prereq: 456, 464, and perm. Project course in area of information organization and retrieval. Each student must complete project successfully and present results. Lectures by instructor and guest speakers.

490 Special Problems in Computer Science (1-15)

Prereq: jr or sr rank, 3 400-level courses below 481 and perm. Special project in 1 of various subfields of computer science or application area studied, investigated and/or solved by individual student or small group working in close relationship with instructor. Suitable problems might include construction of compiler for special purpose artificial language, perfection of computer code to solve some significant problem, or study of coherent subfield of computer science. May be repeated for credit.

491 Senior Seminar (1)

Prereq: sr rank. Formal presentation by individual students of specified topics from current literature in computer science and defense of interpretations or conclusions.

492 Senior Seminar (1)

Prereq: 491. Continuation of 491. See 491 for description.

493 Senior Seminar (1)

Prereq: 492. Continuation of 491-492. See 491 for description.

496 Computer Science Internship (1-15, max 15)

Prereq: jr rank and 3 400-level courses below 481 and perm.

COMPUTER SYSTEMS IN BUSINESS

The computer systems in business (CSB) major is designed for students who want to combine training in business with an emphasis in computers and information systems. CSB majors will be trained for business management and business use of computers. Programming will be taught using the VAX 780 and DEC Rainbow lab, in addition to the IBM PC 4381.

As a CSB graduate, you will be able to communicate with both computer specialists and management professionals. That means you will be a candidate for liaison positions in organizations as they implement or expand computerization. You will be trained to provide advice to other managers as their jobs become more automated with computers, telecommunications, electronic mail, and other technological advances.

200 Introduction to Business Computing (4)

Prereq: soph rank. Introduces student to computer concepts within framework of business applications. Students do computer assignments including BASIC and VISICALC as well as readings in computer literature.

320 Introduction to Business File Processing (4)

Prereq: 200; preference given to CSB majors. Introduction to applications and programming on the big computers, the IBM 4381 and the VAX 780. This experience is necessary for other 300-level CSB courses: COBOL I, Systems I, and Database I.

330 COBOL I (4)

Prereq: 320 or CS 230. Introduction to business-oriented computer language COBOL.

340 Advanced Business Applications (4)

Prereq: 200; preference given to CSB majors. Micro computers will be employed to give CSB students experience with business concepts and models: breakeven, net present value, internal rate of return, cash flow analysis, sensitivity analysis. Graphing the results will often be included. Data base functions will also be included.

380 Business Database I (4)

Prereq: 330; preference given to CSB majors. Introduction to the use of Database Management Systems. The focus of the course will be using existing applications of Database to solve business problems.

390 Business Systems I (4)

Prereq: preference given to CSB majors. Presents a structured approach to systems development through use of structured anal-

ysis methods within the established life cycle of a particular computer system.

420 FORTRAN Programming (4)

Prereq: jr rank or perm. Use of computer in organizations to store, process, and deliver data using FORTRAN language to solve business problems. (CS 220 is equiv to this course.)

425 Advanced FORTRAN (4)

Prereq: 420, or CS 220, or equiv. (winter) Deals with application of FORTRAN programming language to problems in marketing, finance, management, accounting, and economics.

435 COBOL II (4)

Prereq: 330. Deals with application of COBOL programming language to problems in marketing, finance, management, accounting, and economics.

480 Business Database II (4)

Prereq: 380; preference given to CSB majors. Presents students with Database processing concepts and techniques; requires them to demonstrate their knowledge by designing and creating database applications.

490 Business Systems II (4)

Prereq: 390; preference given to CSB majors. Focuses on design and implementation of business systems and will become more heavily involved with applications.

491 Seminar (1-5)

Prereq: perm. Selected topics of current interest in computer systems in business area.

493 Readings in CSB (1-15)

Prereq: perm. Readings in selected topics in computer systems in business. Topics to be selected by students in consultation with faculty members.

497 Independent Research (1-15)

Prereq: perm. Research in selected fields of computer systems in business under direction of faculty member.

498 Internship (1-4)

Prereq: 12 hrs of CSB courses above 200 and/or perm.

DANCE

101 Dance Technique and Theory I (7)

Prereq: perm and audition. Basic dance technique, improvisation, and composition.

102 Dance Technique and Theory II (7)

Prereq: 101 or equiv. Basic dance technique, improvisation, and composition.

103 Dance Technique and Theory III (7)

Prereq: 102 or equiv. Basic dance technique, improvisation, and composition.

111 Music for Dance I (2)

Nature and principles of rhythmic structure in dance and music.

120 Introduction to Dance (3) (2H)

(A) Modern dance, (B) ballet, (C) ethnic dance.

170 Viewing 20th Century Dance (4) (2H)

Art of dance from broad point of view, involving dance viewing, literature, and participation. Deals with esthetic, physiological, social, and cultural aspects.

201 Intermediate Dance Technique and Theory I (7)

Prereq: 103 or equiv. Intermediate dance technique, improvisation, and composition.

202 Intermediate Dance Technique and Theory II (7)

Prereq: 201 or equiv. Intermediate dance technique, improvisation, and composition.

203 Intermediate Dance Technique and Theory III (7)

Prereq: 202 or equiv. Intermediate dance technique, improvisation, and composition.

212 Dance Notation I (3)

Prereq: perm of instructor. Principles of dance notation.

220 Dance Technique II (2) (2H)

Prereq: 120 or equiv. (A) Modern dance, (B) ballet, (C) ethnic dance.

230 Introduction to Dance Kinesiology (2)

Introduces student to basic anatomical materials, kinesiological concepts, and their relationship to production of dance movement.

240 Practicum in Teaching Dance I (1)

Prereq: perm of instructor. Observation and assistance in student teaching. May be repeated.

250 Ethnic Dance of Nonwestern Cultures (2)

Dances from selected nonwestern cultures with emphasis on style and related folklore.

255 Ethnic Dance of Western Cultures (2)

Dances from selected western cultures with emphasis on style and related folklore.

301 Advanced Dance Technique and Theory I (7)

Prereq: 203 or equiv. Advanced dance technique and choreography.

302 Advanced Dance Technique and Theory II (7)

Prereq: 301 or equiv. Advanced dance technique and choreography.

303 Advanced Dance Technique and Theory III (7)

Prereq: 302 or equiv. Advanced dance technique and choreography.

310 Accompaniment for Dance (2)

Prereq: 111 or perm. Basic problems in accompanying dance and analysis of dance forms related to accompaniment.

312 Music for Dance II (3)

Prereq: 111 or equiv. Also for music composition majors who wish to write for dance theater. History of music for dance. Choreographer-composer relationship.

320 Dance Technique III (2) (2H)

Prereq: 220 or equiv. (A) Modern dance, (B) ballet, (C) ethnic dance.

331 Analysis of Dance Movement (4)

Prereq: 230. Explores skeletal alignment and deviation, muscular development and function, and mechanical efficiency in production of dance movement. Basic to course study is thorough understanding of principles of stability and motion as they relate to dance.

351 Dance Cultures of the World I (4) (2T)

Introduction to dance cultures of world (excluding western art dance). Function of dance in society and its relationship to other arts.

352 Dance Cultures of the World II (4) (2T)

Introduction to dance cultures of world (excluding western art dance). Function of dance in society and its relationship to other arts.

353 Dance Cultures of the World III (4) (2T)

Introduction to dance cultures of world (excluding western art dance). Function of dance in society and its relationship to other arts.

370 Viewing 20th Century Dance (4) (2H)

Prereq: not open to students who have had 170; jr rank and above. Art of dance from broad point of view, involving dance viewing, literature, and participation. Deals with esthetic, physiological, social, and cultural aspects.

380 Practicum in Dance Production (1)

Prereq: perm of instructor. Supervised lab practice in production and/or performance. May be repeated.

385 Dance Repertory (1-3)

Prereq: majors only, audition and perm; may be repeated for total of 12 hrs. Rehearsal and performance of choreographic works taught by choreographer or reconstructors with aid of video-tape, film, and/or dance scores.

401 Independent Choreography and Experimental Production I (6)

Prereq: 303 or equiv. Advanced dance technique and experimental dance production.

402 Independent Choreography and Experimental Production II (6)

Prereq: 401 or equiv. Advanced dance technique and experimental dance production.

403 Independent Choreography and Experimental Production III (5)

Prereq: 402 or equiv. Advanced dance technique and experimental dance production.

411 Dance Notation II (3)

Prereq: 212 or equiv. Continuation of 212 with more advanced reading and writing in notation.

413 Dance Notation III (3)

Prereq: 411 or equiv. Continuation of 411 with more advanced reading and writing in notation.

420 Dance Technique IV (2) (2H)

Prereq: 320 or equiv. (A) Modern dance, (B) ballet, (C) ethnic dance.

432 Dance Kinesiology Seminar (2)

Prereq: 331. Assists student to construct anatomically sound and functionally effective dance class.

440 Practicum in Teaching Dance II (2)

Prereq: 240 and perm. Student teaching under supervision.

441 Teaching Dance I (3)

Prereq: perm of instructor. Principles of teaching dance and their practical application. Dance for children.

442 Teaching Dance II (2)

Prereq: at least 1 qtr of 240; co-req: 440. Principles of teaching dance and their practical application. Dance for adolescents.

443 Teaching Dance III (2)

Prereq: at least 1 qtr of 240; co-req: 440. Principles of teaching dance and their practical application. Dance for adults.

471 History of Dance I (4) (2H)

Development of western dance in 19th and 20th centuries with emphasis on ballet and modern dance.

472 History of Dance II (4) (2H)

Survey of dance forms and their functions; dance motivation from sympathetic magic in tribal societies, in mythic ritual, and in dance-drama.

473 History of Dance III (4) (2H)

Survey of dance from early Christian church through Baroque period.

480 Production Problems for Dance Theater (2)

Prereq: perm of instructor. Includes choreography, performance, and production aspects of senior projects and other dance events.

490 Independent Study (1-10)

Prereq: perm of instructor.

the prelaw track include ECON 231, 260, 316, 321, 334, and 352. For the policy analysis track, ECON 231, 311, 312, 313, 315, 322, and 430 are among those recommended. For the business economics track, ECON 231, 260, 305, 306, 320, and 332 are recommended. Additional information can be obtained from the Department of Economics.

A minor in economics consists of a minimum of 28 credit hours in economics including ECON 101, 102, 303, 304, and at least two other courses at the 300 level or above.

Majors in business economics in the College of Business Administration must complete the B.B.A. degree requirements in the college and take at least 20 additional hours of economics including ECON 304 and 385. ECON 380 and 381 may *not* be counted toward meeting this 20-hour course requirement.

101 Principles of Macroeconomics (4) (2S)

Prereq: MATH 101 or higher math placement. Basic theory of national income analysis. Economic problems and economic institutions of society. May be taken before or after 102.

102 Principles of Microeconomics (4) (2S)

Prereq: MATH 101 or higher math placement. Basic theory and economic analysis of prices, markets, production, wages, interest, rent, and profits. May be taken before or after 101.

201H Economics for Honors Tutorial College Students (4)

Prereq: enrollment in Honors Tutorial College. Economic theory, history, and statistics. Development of analytical framework for understanding contemporary economic issues and trends. Discussion, problem-solving, reports emphasizing student participation.

202H Economics for Honors Tutorial College Students (4)

Prereq: 201H. Continuation of 201H. See 201H for description.

213 Current Economic Problems (4)

Prereq: 101 (or 301) and 102 (or 302). Application of economic theory to current economic problems with emphasis on public policy implications. Depressed areas, technological unemployment, economic growth, energy, inflation, and agricultural instability considered.

214 The Economics of War and Peace (4)

Prereq: 101 (or 301) and 102 (or 302). Application of techniques of economic analysis to examination of various aspects of national military involvement. Includes consideration of both microeconomic and macroeconomic implications of war and peace.

231 Government Regulation of Business (4)

Prereq: 101 (or 301) and 102 (or 302). Social consequences of monopoly and competition. Various policy prescriptions dealing with economic concentration and market structure considered, as well as impact of these policies on U.S. business. Government regulation of business reviewed and evaluated.

301 Introduction to Economic Analysis (4) (2S)

Prereq: not open to fr or to those who have had 101. Description same as for 101 but content treated at more advanced level.

302 Introduction to Economic Analysis (4) (2S)

Prereq: not open to fr or those who have had 102. Description same as for 102 but content treated at more advanced level.

303 Microeconomics (4)

Prereq: 101 (or 301) and 102 (or 302). Price system as allocative mechanism. Price and production policies of individual firms and consumers under alternative market conditions and analysis of these policies on social efficiency of resource allocation. Students expected to have understanding of elementary algebra and geometry.

304 Macroeconomics (4)

Prereq: 101 or 301, jr; soph if major. Factors determining level of nation's economic activity and responsible for growth and stability in nation's economy. Part of course devoted to measures of national income while remainder consists of analysis of interrelationships among production, price levels, relative prices, employment, and capital formation. Students expected to have understanding of elementary algebra and geometry.

305 Managerial Economics (4)

Prereq: 102, QBA 201, and MATH 163A. Analysis of decision-making in enterprise; market environment; measurement of influence of policy and nonpolicy variables on sales and costs; sales, cost,

DESIGN TECHNOLOGY

See Industrial Technology.

ECONOMICS

Two opportunities are open to students interested in majoring in economics: a liberal arts program in the College of Arts and Sciences and a business economics program in the College of Business Administration.

Majors in economics in the College of Arts and Sciences must complete the A.B. degree requirements of the college, and, in addition, take at least 40 hours of economics including ECON 101, 102, 303, 304, 381, and 385.

Students with definite career goals are encouraged to follow a specific track within the economics major in the College of Arts and Sciences. A track identifies those electives which are most relevant to a given career. For example, courses most relevant to

and profit forecasting; empirical studies of market structure and pricing; may include various applications of linear programming.

307 History of Economic Thought (4)

Prereq: 101 or 301 and 102 or 302. Evolution of major economic doctrines; mercantilists and cameralists, physiocrats, Adam Smith and classical school, historical school, Austrian school, Alfred Marshall and neoclassicists.

308 Modern Economic Thought (4)

Prereq: 101 or 301 and 102 or 302. Contributions to economics of most significant writers since Alfred Marshall.

309 Institutional Economics (4)

Prereq: 101 (or 301) and 102 (or 302). Economic theory and policy contributions of Veblen, Commons, Ayres, and other modern dissenters from traditional economic thought. Principles of technological progress and institutional adjustment; influence on contemporary theory and policy.

310 Urban Economics (4)

Prereq: 101 (or 301) and 102 (or 302). Application of economic analysis to urban problems; urban economic growth and structure (location patterns, land use and environment, urban transportation, and housing); human resources in urban economics and public sector in metropolitan context.

311 Inequality of Personal Wealth and Income (4)

Prereq: any course in statistics. Quantitative and qualitative differences in wealth and income between low, middle, and high income groups in society using historical, statistical, and mathematical techniques. Open to all students.

312 Economics of Poverty (4)

Prereq: 101 (or 301) and 102 (or 302). Incidence, causes, and consequences of poverty in U.S. Economic theory, history, statistics applied to analysis of poverty-reduction measures.

313 Economics of the Environment (4)

Prereq: 101 (or 301) and 102 (or 302). Economic analysis of such environmental matters as air, water, and noise pollution, population growth, and land use. Emphasis placed on use of economic theory and empirical research in evaluating environmental policies.

315 Economics of Health Care (4)

Prereq: 101 (or 301) and 102 (or 302). Allocating resources to health care, economics of hospital care, health care in U.S. and abroad, supply and demand for nurses, solution of health care problems: paramedics, prepaid plans, malpractice problems.

316 Economics and the Law (4)

Prereq: 101 (or 301) and 102 (or 302). Economic consideration of property, contracts, crimes and torts, monopoly and antitrust law, taxation, and constitutional issues.

318 Economics of Sports (4)

Prereq: 101 (or 301) and 102 (or 302). Growth of sports in U.S. Organization and structure of sports market. Revenues, costs, and profitability in sports activities. Economic discrimination in sports.

320 Labor Economics (4)

Prereq: 101 (or 301) and 102 (or 302). Economic forces generating modern labor problems. History of labor movement; labor in politics; labor-management relations; wages and full employment.

321 Labor Legislation (4)

Prereq: 101 (or 301) and 102 (or 302). Law bearing upon labor problems. Labor-relations legislation, old-age and unemployment insurance, worker's compensation, and wages-and-hours legislation.

322 Economics of Human Resources (4)

Prereq: 101 (or 301) and 102 (or 302). Current developments in theory, empirical research, and policy with respect to investment in human resources, economic value of education, manpower programs, and growth.

332 Industrial Organization (4)

Prereq: 303 or 305. Market structure, market conduct, and market performance in U.S. industry. Emphasis on developing theoretical framework for evaluating efficiency of industry. Merger activity examined historically and its causes determined. Characteristics of principal manufacturing and processing enterprises

evaluated. Contribution of theory of industrial organization to macroeconomic theory and microeconomic theory discussed.

333 Government and Agriculture (4)

Prereq: 101 (or 301) and 102 (or 302). Problems of American agriculture as industry; economics of government policies and programs; consideration of forces and objectives in policy formation.

334 Public Utilities (4)

Prereq: 303 or 305. Economic basis of public utility concept and its relation to business organization. Nature, scope, development, legal organization, and regulation of public utilities.

335 Economics of Energy (4)

Prereq: 102 or 302. Applies economic theory to analyzing public policy issues regarding energy production and use — including such topics as price controls, import dependency, conservation, supply outlook, and industry concentration.

340 International Economics (4)

Prereq: 101 (or 301) and 102 (or 302). Economic relations of nations. Some topics considered are economic basis for international trade and investment; mechanics of international exchange; tariffs, quotas, exchange control, cartels, and state trading as devices of economic nationalism; and international economic cooperation with special reference to organizations affiliated with United Nations.

350 Economic Development (4)

Prereq: 101 (or 301) and 102 (or 302). Nature of, obstacles to, and future possibilities for economic growth of nations. Special emphasis given to problems of underdeveloped countries. Studies of selected countries utilized.

351 Agricultural Development (4)

Prereq: 101 (or 301) and 102 (or 302). Patterns of agricultural development: technological and demographic changes in agriculture; socio-economic problems; marketing arrangements; case studies of specific agricultural development projects.

352 Economic History of the United States (4)

Prereq: 101 (or 301) and 102 (or 302). Economic factors in development of U.S. including historical growth of economic institutions such as banking, manufacturing, labor unions, and agriculture, from colonial times to present.

353 European Economic History (4)

Prereq: 101 (or 301) and 102 (or 302). Economic growth of developed countries. Focus on industrial revolutions in Great Britain, France, Germany, Soviet Union, and Japan. Historical experience of these countries related to various theories of economic change.

354 Latin American Economic History (4)

Prereq: 101 (or 301) and 102 (or 302). Origins of economic institutions and policies which affect current problems of economic development, e.g., latifundia system, export of primary commodities, private foreign investment, etc. Interrelationship of economic and political factors. Review of Aztec, Inca, and colonial economies but greater emphasis on developments in 19th and 20th centuries. Introduction to current economic conditions and government policies, foreign exchange shortage, import substitution, urbanization, etc.

356 Regional Development (4)

Prereq: 101 (or 301) and 102 (or 302). Analysis of industrial location and urban growth within regions in connection with community, state, or national planning. Consideration of national policies of aiding special regions, such as Appalachia or metropolitan central city. North-South issues in U.S. and in other nations.

360 Money and Banking (4)

Prereq: 101 or 301. Nature of money, debt, and credit; relations between money, finance, and economic activity.

370 Comparative Economic Systems (4)

Prereq: 101 (or 301) and 102 (or 302). Theoretical and institutional characteristics of capitalism and socialism with specific emphasis on prevailing economic systems in U.S., England, and Russia.

371 Economics of Planning (4)

Prereq: 101 (or 301) and 102 (or 302). Economics of planning and its major applications to private and public planning; national, regional, and local planning; centralized and decentralized planning. Procedures and techniques of planning; organization, economic analysis, social accounting, input-output analysis, linear

programming, location theory, industrial complex analysis; gravity, potential and spatial models, computers, and planning; research and development.

372 Economics of the Soviet Union (4)

Prereq: 101 (or 301) and 102 (or 302). Operation of economy of Soviet Union. Allocation of resources, planning, saving and investment, agriculture, public finance, price system, and international trade.

380 Mathematics for Economists (4)

Prereq: 101 (or 301) and 102 (or 302) and perm. Mathematical analysis in economics. Calculus and matrix algebra techniques used prominently in economics literature, together with their application to selected problems in economics.

381 Statistics for Economists (4)

Prereq: 101 (or 301) and 102 (or 302). (fall) Statistical methods used in economics with special emphasis on time series and regression analysis.

385 An Introduction to Economic Methodology and Research (4)

Prereq: 303, 304, and 381 or equiv. Methods used by economists in investigation of economic problems. First part involves research methods, including contemporary statistical estimation techniques. Second part applies these techniques to investigation of economic phenomena. Types of application include construction and testing of simple econometric model, estimation of production functions, evaluating theories of factor pricing, estimating social costs of pollution, etc.

406 Monetary Theory and Policy (4)

Prereq: 303 (or 305) and 304. Emphasis on monetary economics. Money demand and supply theory and policies for minimizing cyclical fluctuations in economic activity.

425 Public Policy Economics (4)

Prereq: 303 or 305. Survey of economic approach to analyzing public policy issues. Uses concepts of welfare economics, public choice economics, and cost-benefit analysis, as applied to sample of policy subjects.

430 Public Finance (4)

Prereq: 303 or 305 or perm. Role played by government as user of economic resources and redistributor of incomes. Some questions explored: need for government's entry into economy, optimal size of government, selection of tax and expenditures schemes, and effects of government economic activity on private sector.

431 Economics of Transportation (4)

Prereq: 303 or 305. Economics of transport pricing; regulations of transport and national transport policy.

441 International Economic Policy (4)

Prereq: 340. Current economic developments of foreign and U.S. economic policy. National and international aspects of policy will include tariffs, controlled trade, international agreements, commercial treaties, foreign exchange control, clearing agreements, international liquidity controversy, and contemporary balance of payments problems. Roles of institutions such as World Bank and International Monetary Fund discussed with emphasis on interaction of domestic and international goals and policies.

455 African Economic Development (4)

Prereq: 350 or perm. Economic characteristics of African societies as traditional economies and in process of modernization.

461 Monetary History of the United States (4)

Prereq: 360 or 304. Correlation of developments in U.S. history with development of monetary institutions, policy, and theory. Evolution of commercial and central banking and relationship of these to economic activity.

473 Economics of Southeast Asia (4)

Prereq: 350 or perm. Economic characteristics, development problems, strategies, and prospects of countries of Southeast Asia.

474 Economics of Latin America (4)

Prereq: 350 or perm. Economic characteristics of Latin American countries and their trends since WW II.

475 Chinese Economy (4)

Prereq: 350 or perm. Introductory familiarization with Chinese economy. China's early industrialization, 1880-1931; socialist transformation of each economic sector, 1949-1966; overall per-

formance of Chinese economy and each economic sector; and Maoist revision of orthodox Marxist-Leninist economic doctrines.

482 Introduction to Econometrics (4)

Prereq: 303 (or 305), 304, and 381 or equiv. Applications of statistics to economics. Design and estimation of economic models. Estimation of simultaneous equation systems.

491 Seminar (3, 4, or 5)

Prereq: perm. Selected topics of current interest in economics area.

493 Readings (1-15)

Prereq: perm. Readings in selected fields of economics. Topics selected by student in consultation with faculty member.

493X Readings (1-15)

Prereq: perm. Study abroad.

495 Research (3, 4, or 5)

Prereq: perm. Methodology, analysis of data, and preparation of research findings.

497 Independent Research (1-15)

Prereq: perm. Research in selected fields of economics under direction of faculty member.

EDUCATION

As specified in the College of Education program section of this catalog, all of the programs and courses in the College of Education have recently been revised to meet new standards of the Ohio State Department of Education. Students are urged to consult their advisors regarding program requirements and scheduling. In particular, students should note that some pairs or groups of professional education courses must be taken concurrently. Questions may be addressed also to the Office of Student Personnel Services, 124 McCracken Hall.

Curriculum and Instruction

275 Learning Processes in the Classroom (5)

Prereq: PSY 101 (not available to students who have taken PSY 275). Focuses on major aspects of learning theories, their implication, and applications to classroom situations as well as aspects of measurement and evaluation.

331J Educational Research Techniques and Writing (4)

(1J)

Prereq: jr standing. (fall) Concentration upon communication skills of reading, writing, and speaking, utilizing educational writings dealing with history of education, philosophy, psychology, sociology, and current issues. Development of critical reading, effective writing and speaking skills.

401 Advanced Urban Field Experience (2)

Prereq: jr standing and completed application in Field Experiences Office by May 1 of previous yr. (fall) *Staff*. Participation in urban setting as scheduled, either prior to or following fall qtr. Fall qtr registration only. These experiences provide opportunities to work with low socioeconomic status or minority students in urban schools.

461 Introduction to Individualization of Education (4)

Prereq: perm. (spring) *M. Johnson*. Broad objective of course is for each participant to develop knowledge of major concepts for individualization of education and to demonstrate this knowledge through creation of instructional package ready for implementation in classroom setting. Course focus is to facilitate study of major components necessary for teacher to implement individualized instruction in classroom.

465 Introduction to Teaching the Talented and Gifted (4)

(1st summer) Provides introduction to rationale, scope, and nature of concerns relative to education of gifted youth. Attention given to overview of problems and issues; including (A) societal factors that influence programs, (B) characteristics and identification of gifted youths, and (C) current and recommended programs.

480 The Teacher, School, and Society (3)

Prereq: cannot be taken while student teaching. *A. Clubok, G. Wood, E. Stevens.* Current trends and issues in American secondary education, utilizing materials drawn from social and cultural foundations of education.

492 Workshop in Curriculum and Instruction (1-15)

Prereq: perm. Designed to provide practicing teachers and other instructional personnel with in-service education directed toward their identified needs. Facilitates offering of short courses, workshops, and summer institutes. Areas of concentration currently available: A. Language Arts, B. Social Studies, C. Science, D. Mathematics, E. Reading, F. Kindergarten, G. Individualizing Instruction, H. Team Teaching, I. Interaction Analysis, J. Developing Behavioral Objectives, K. Curriculum Development, L. Interdisciplinary Topics, M. Special Topics, N. Special Education Topics, O. Supervision of Instruction, P. Education for Gifted.

Economic Education

346 Economics in the Curriculum (3-5)

For teacher-education students, provides study of (A) fundamental economic concepts, (B) methods of inquiry employed by economists, and (C) relationship of economics content to classroom instruction and instructional materials. Not recommended for students who have completed ECON 101 and 102.

400 Public Attitudes Toward Business (4)

Prereq: ECON 101 and 102; jr rank. Introduces students to literature and prevailing public opinion toward private enterprise system. Shows how business may effectively utilize economic education to improve attitudes of consumers toward business.

447 Economic Analysis and Its Application to the Curriculum (2-5)

Prereq: 346 or HE majors. For elementary and secondary teachers. Designed to emphasize methods of inquiry employed by economists and their application to theories of instruction.

448 Economic Policy and Its Application to the Curriculum (2-5)

For elementary and secondary teachers, designed to provide application of economic analysis to economic policy and courses of study.

449 Economic Education Programs (3-5)

Economic education in schools. Administrative and organizational structures, current curriculum development projects, essential economic understandings that should be taught and their place in curriculum, ways to improve economic education, and economic education organizations.

491 Seminar (3-5)

Prereq: perm. Selected topics of current interest in economic education.

492 Research (3-5)

Prereq: perm. Methodology, analysis of data, and preparation of research findings.

493 Readings (1-15)

Prereq: perm. Readings in selected areas of economic education.

497 Independent Research (1-15)

Prereq: perm. Research in selected fields of economic education under direction of faculty member.

498 Internship (1-15)

Prereq: perm. Individual projects under faculty supervision. May be repeated to a maximum of 15 hours.

Educational Administration

452 Problems in Administration of Education (1-4)

Prereq: perm. Variable-topic course for independent study, institutes, and workshops.

Educational Media

201 Use of Library Resources I (3)

(2A)

Designed to acquaint student with resources available in academic library. Prime objective is that students learn to analyze information needs and to develop systematic approach toward solution.

289 Sophomore Practicum (2)

Prereq: soph rank, perm. *S. Roberts, S. Strother.* Practicum designed to provide professional experience for sophs who have declared majors in K-12, and noncertificated media management. Also, field experience will provide opportunity for evaluation of performance at soph level. Must arrange qtr before.

301 Library Service to Children (4)

S. Roberts. Aspects of library work with children, investigated through films, texts, current articles, field trips, and group discussion. Participants practice skills in storytelling with groups of children in library situations. Selection of library media materials important part of coursework.

302 Adolescent Materials and Services (4)

S. Roberts. Selection process for secondary school library media center, involving examination of and evaluation of books and nonbook materials; problems of maintaining intellectual freedom, and planning of programs for library media center.

303 Teaching Library Skills K-12 (3)

Prereq: jr standing, 289, perm. *S. Roberts, S. Strother.* Instructional program for teaching student skills related to gathering and utilization of information. Development of sequential program of library/media center instruction which can be followed from kindergarten through grade 12, including methods and materials for instruction.

304 Acquisition and Preservation of Materials (3)

Prereq: 201 or perm. *S. Roberts.* Ordering, receiving, processing, housing, and preservation of print and nonprint materials in media center.

305 Use of Library Resources II (3)

Prereq: 201. (winter) *S. Roberts.* Study directed toward specific subjects: philosophy, psychology, fine arts, literature, history, social science, education, science and technology, and references relevant to them. Analysis of information needs and methods of meeting those needs.

332 Microcomputer: Applications in Education (4)

Prereq: sophomore rank. *L. Pikaart, S. Strother.* Provides pre-service educators with introduction to use of microcomputers in education. Emphasis on evaluating hardware and software, exploring educational applications, and developing introductory program-writing skills.

389 Junior Practicum (2)

Prereq: jr standing, 289, perm. *S. Roberts, S. Strother.* Practicum designed to provide professional experiences for jrs who have declared majors in K-12 and noncertificated media management. Also, field experience will provide opportunity for evaluation of performance at jr level. Must arrange qtr before.

402 Advanced Library/Media Studies (2-5)

Prereq: perm. *S. Roberts, S. Strother.* Elective designed for student who wants to explore some facet of library work in greater depth.

403 Classification and Cataloging (5)

(fall) *S. Roberts.* Classifying and cataloging books and other print materials for high school library media center. Students make practice card catalog.

404 Basic Cataloging of Nonprint Materials (4)

Prereq: 403 or perm. *S. Roberts.* Cataloging nonprint materials with practice in preparation of catalog cards. Establishing procedures and guidelines relative to cataloging of nonprint materials whereby these materials may be integrated into library catalog and materials intershelved.

480 Introduction to Educational Media (4)

Prereq: jr rank. *D. Brodeur, S. Strother.* Application of principles of educational technology and media to teaching-learning situation. Includes lab experiences in basic production of materials and equipment operation.

480A Introduction to Educational Media (2)

Prereq: EDSE 250, EDSE 250L, EDSE 270, EDSE 270L, admission to jr standing. *S. Roberts, S. Strother.* Clinical experience designed to provide secondary teacher education student with expertise in: (A) operation of audiovisual equipment; (B) demonstration/display board design; (C) spirit duplication; (D) mounting and preservation of materials; and (E) preparation of hand-made and thermographic transparencies.

481 Fundamentals of Instructional Design and Development: Media Emphasis (4)

Prereq: 480, 482 and perm. *D. Brodeur, S. Strother.* Investigates principles and practices of integrating media into instructional process. Media examined within context of instructional design process, nature of communication, teaching, and learning.

482 Production of Instructional Material (4)

Prereq: jr rank and 480 or perm of instructor. *D. Brodeur, S. Strother.* Develops basic techniques for design and production of wide variety of instructional and display materials. Includes lab experiences, illustration, lettering, coloring, preservation, and reproduction techniques used in creating educational displays, slide programs, transparencies, and other projected and nonprojected materials.

483 Selection and Evaluation of Media (4)

Prereq: 480. *S. Roberts, D. Brodeur.* Principles for selection and evaluation of print and nonprint media; use of standard selection aids and reviews, writing of annotations, policies governing building and maintenance of collection covered.

488 Practicum in Educational Media (3)

Prereq: 403, 480, and 489. *S. Roberts, S. Strother.* Supervised library media field experience of professional nature of not fewer than 90 clock hrs. Because of nature of course student must obtain perm 1 qtr previous to enrollment in course.

489 Organization and Administration of Educational Media Programs (5)

Prereq: 351 or perm. *S. Strother.* Organization and administration practices for educational media programs in individual schools, school districts, and industrial settings. Emphasis on budget procedures, staffing, acquisition, organization, and evaluation techniques.

Elementary Education

200 Studies of Children (4) (2S)

D. Rogers. Bases for developmental theory of education; growth sequences through adolescence; principles of development, behavior, and learning; techniques of child study; implications for educational practice. No credits awarded if HECF 160 or PSY 273 has been taken.

200L Studies of Children/Clinical-Field (1)

Designed to provide series of coordinated clinical/field experiences complementary to 200. Places students in public school settings for observations and activities related to study of child development.

306 Kindergarten — Theory and Methods (6)

Prereq: jr standing in teacher education. *D. Rogers.* Combines evolving theory of education in kindergarten with selection and uses of learning materials through lab practice and participation experiences in local schools.

310 Teaching the Language Arts in the Elementary Schools (3)

Prereq: jr standing in teacher education. *S. Rebottini, R. Pinney, B. van der Veur.* Methods course in teaching areas of language arts other than developmental reading. Treats basic information in language development, oral and written language activities, spelling, penmanship, grammar, usage, poetry and drama, language arts organization and management, and evaluation and remediation techniques in language arts areas.

310L Teaching the Language Arts Field and Clinical Experience (2)

Prereq: jr standing in teacher education; coreq with EDEL 310. *R. Pinney, S. Rebottini, B. van der Veur.* Field/clinical component for 310. Designed to give elementary education majors practical field and clinical experiences in public schools and is complementary to theory presented in 310.

311 Teaching of Reading in the Elementary School (4)

Prereq: jr standing in teacher education, 310 and 310L; coreq with 311L. *R. Pinney, S. Rebottini, B. van der Veur.* Preservice preparation for teaching of developmental reading, K-6; text and supplementary readings; lecture, demonstration, and discussion; multi-media resources; observations and participation in schools; projects for practical competence.

311L Teaching of Reading in the Elementary School Field/Clinical (1)

Prereq: jr standing in teacher education, 310; coreq with 311. *R. Pinney, S. Rebottini, B. van der Veur.* Field/clinical component to accompany 311. Gives elementary education majors practical field and clinical experiences in public schools and is complementary to theory presented in 311.

321 Children's Literature (3)

Prereq: jr standing in teacher education or perm; coreq with 321L. Treats body of literature, by genre, appropriate for children from preschool through middle-school age and various techniques for utilizing children's literature in school setting.

321L Children's Literature — Field/Clinical (1)

Prereq: jr standing in teacher education or perm; coreq with 321. *R. Pinney, S. Rebottini, C. Smith.* Field component for 321. Treats body of literature, by genre, appropriate for children from preschool through middle-school age and various techniques for utilizing children's literature in school setting.

330 Teaching Mathematics in the Elementary School — Kindergarten through Grade 3 (2)

Prereq: jr standing in teacher education and MATH 120-121 (or equiv). *C. Smith, P. Cemen.* Examination of methods and materials used in teaching of mathematics in elementary school programs. Special emphasis on use of mathematical models, adjusting instruction for individual pupil growth, and diagnosing learning difficulties in lower elementary school (kindergarten through grade 3).

330L Teaching Mathematics in the Elementary School — Kindergarten through Grade 3 — Field/Clinical (1)

Prereq: jr standing in teacher education; coreq with 330. *C. Smith, P. Cemen.* Students will observe and teach mathematics lessons in elementary school under supervision of course instructor. Proficiency in use of mathematical models and manipulative teaching aids demonstrated by each student in mathematics education lab. Field experiences will take place in primary (kindergarten-grade 3) classroom.

331 Teaching Mathematics in the Elementary School — Grades 4-8 (2)

Prereq: 330. *C. Smith, P. Cemen.* Examination of methods and materials used in teaching of mathematics in elementary school programs. Special emphasis on use of mathematical models, adjusting instruction for individual pupil growth, and diagnosing learning difficulties in upper elementary school (grades 4-8). Continuation of 330.

331L Teaching Mathematics in the Elementary School — Grades 4 through 8 — Field/Clinical (1)

Coreq with 331. *C. Smith, P. Cemen.* Students observe and teach mathematics lessons in elementary school under supervision of course instructor. Proficiency in use of mathematical models and manipulative teaching aids demonstrated by each student in mathematics education lab. Field experiences will take place in upper-grade-level classroom (grades 4-8).

340 Teaching of Science in the Elementary School (4)

Prereq: jr standing in teacher education; 12 hrs of science including biology and physical science. *R. Martin.* Materials and methods of teaching science in elementary schools. Textbooks, science equipment, and related instructional materials used in lab lessons.

350 Teaching of Social Studies in the Elementary School (3)

Prereq: 12 hrs of social science including GEOG 121, jr standing in teacher education. *A. Leep.* Materials and methods in teaching social studies in elementary schools. Special emphasis on practical experience in preparation and teaching of units.

350L Teaching of Social Studies in the Elementary School — Field/Clinical (1)

Prereq: 12 hrs of social science including GEOG 121, jr standing in teacher education. Coreq with EDEL 350. *A. Hoy, A. Leep, M. Ploghoft.* Field/clinical component to accompany 350. Gives elementary education majors practical field and clinical experiences in public schools and is complementary to theory presented in 350.

372 Managing an Elementary School Classroom (2)

Prereq: jr standing in teacher education. *A. Hoy, A. Leep.* Provides preservice teacher with knowledges and skills to manage records, learning environment, and pupils within elementary school learning setting (e.g., classroom, playground, etc.).

407 Evaluation in the Elementary School (3)

Prereq: 16 hrs of education. *Staff.* Standardized tests in elementary school with emphasis on selection, interpretation, and use. Teacher-made tests, check lists, rating scales, and anecdotal records. Elementary statistical treatment of test scores and grading.

411 Diagnosis and Treatment of Reading Disabilities (4)

Prereq: 311/311L or EDSE 420, perm. *S. Rebottini, B. van der Veur, R. Pinney.* Correlates of variability in reading proficiency. Incidence of retardation and disability. Proposed causes of failure and concept of multiple causation. Specialized materials and instructional efforts. Systematic observation of cases of reading disability and preparation of case report.

412 Reading Laboratory Practicum (4, max 12)

Prereq: sr rank, 411. *S. Rebottini, B. van der Veur, R. Pinney.* Application of developmental approach to problem cases in reading instruction, participation in diagnostic examination, parent and teacher conferences, individual procedures in tutoring, staffing of cases, and preparation of reports. (Wkly group discussion period, lab sessions arranged.)

430 Modern Elementary Mathematics Curriculum (3)

Prereq: 330. *C. Smith.* Modern elementary mathematics curriculum with emphasis on why changes are occurring. Nature of changes as reflected from experimental programs, effect of changes on methods of teaching, implementation of these changes in classroom.

460 The Child and the Curriculum (4)

Prereq: student teaching. (Academic yr plus 1st term of summer session.) *C. Smith.* Develops purpose for elementary education through study and research of curriculum and learning problems. Emphasis on service role of elementary school curriculum to child and society and role of teacher in laying educational foundations in development of self-worth for each child.

490 Study in Elementary Education (1-5, max 15)

Prereq: perm of dept chairman. Independent and/or group study of some special interest and concern (problems, area, questions) under guidance of staff; assigned and suggested readings and other resources and experiences; frequent conferences; preparation of final report.

Guidance and Counseling

102 Life and Career Experiences Analysis (4)

Prereq: perm from Adult Learning Services. Seminar designed to assist adult students in clarifying career, personal, and educational goals with emphasis on documenting college-level learning from prior experience and documenting this learning for assessment.

201 Career and Life Planning Seminar (3) (2S)

Designed to provide knowledge and skill in career and life planning for fr and sophs, especially for those who are undecided about college major and career. Emphasis on identifying strengths, clarifying values, exploring career options, and in developing decision-making skills. *Special section for Adult Learning Services students only:* Designed to provide knowledge and skill in career and life planning especially for adult who is consid-

ering job or career change. Emphasis on identifying skills, interests, experience, and values in relationship to new career choices and options.

400 Special Topics in Guidance, Counseling, and Student Personnel (1-5)

Prereq: perm. Independent studies, specialized projects, and seminars on following special topics: alcohol and substance abuse; biofeedback, self-control, and management of stress; marriage and family issues; assertiveness; human sexuality; and Adlerian theory, method, and research. (May be repeated for max of 18 hrs.)

410 Human Relations (3) (2S)

Prereq: sr rank or perm. Study and practice of developing healthy and mutually satisfying interpersonal relationships. Lecture and discussion groups focus on dynamics of human relationships, factors fostering effective interaction, and significance of self concepts in human communication. Topical headings include value clarification, games people play, cueing into affect and feelings, self disclosure and trust, conflict resolution, helper-helper relationships, sexuality, prejudice, alcoholism, death and dying, multicultural education, stress management, sexism, constructive use of anger, etc.

420 Guidance Practices in Elementary Schools (4)

Need, scope, and nature of elementary guidance surveyed. Guidance approaches and procedures examined for their usefulness in working with children and parents. Roles of elementary school counselor and other pupil personnel specialists reviewed for their contribution to growth and development of children. Opportunity for students to achieve greater self-understanding through involvement in self-appraisal.

430 Guidance in American Secondary Schools (4)

Need, scope, and nature of guidance in secondary school. Guidance approaches and procedures examined for their usefulness by teachers and counselors in working with children and parents. Roles of secondary school counselor and other pupil personnel specialists reviewed for their contribution to growth and development of children. Opportunity for students to achieve greater self-understanding through involvement in self-appraisal.

440 Foundations in Group Dynamics (4) (2S)

General principles and basic techniques of group dynamics. Interaction in human relations situations that occur in agency settings, business, classrooms, community, resident living, and various types of professionally led training, counseling, and growth groups. Through both cognitive and affective learning opportunities, students learn to understand and use group dynamics principles in areas of personal and professional interaction. Students attend weekly cognitive seminars as well as participate in on-going group lab.

International and Comparative Education

420 Comparative Cultures and Education (4)

Prereq: perm. (fall, spring) Emphasis on distinctive cultural, economic, and political forces which shape patterns, problems, and roles of education in some selected developed and developing nations. These include U.S., some European countries, and at least one African and/or Asian nation where former or present western culture has impact. Assessment of this impact especially on educational developments.

425A Education and Development in Africa (4) (2T)

Prereq: perm. (winter) Interdisciplinary course focusing on tradition and change in African societies, problems of political independence, economic development, cultural values in transition, tribalism and nationalism, and role of Africa in world peace and international cooperation. Tradition and change in African education, landmarks in African educational developments, and role of education in economic and technological development. Issues and problems in African education.

425B Education and Development in Asia (4) (2T)

Prereq: perm. Same emphasis as 425A on tradition and change in society, culture and education, and role of education in national development and international understanding; discussion of pertinent educational issues and problems.

425C Education and Development in Latin America (4) (2T)

Prereq: perm. Same emphasis as 425A-425B, on tradition and change in society, culture and education, and role of education in national development and international understanding; discussion of pertinent educational issues and problems.

432 Perspectives in International Education (4)

Prereq: EDIC 420 recommended, perm. Interdisciplinary course dealing with concept and issues of international understanding, its psychological, economic, and political preconditions; perceptions, values, and attitudes that constitute or impede understanding among individuals, groups, races, and nations; human and cultural dimensions in technical assistance programs and in international relations; role of education in attitude change and formation relative to international understanding and development.

450 Teaching Strategies for Cultural and International Understanding (4)

Prereq: perm, sr rank. Psychological and sociological foundations of cultural values and ways of life investigated. Strategies for developing cross-cultural understanding and cooperation studied and developed. Emphasis on innovative approaches to learning for elementary and secondary school pupils.

Professional Laboratory Experience

360 Field Experience in Elementary or Secondary Schools (2)

Prereq: jr standing, perm. Observation and participation in elementary and secondary schools. Prior approval must be secured from Field Experience Office in May for those planning experience in August-September period and in November for those planning participation in December. May be repeated.

361 Field Service in Education (2)

Prereq: soph rank. Participation in community agencies, summer camps, recreation programs, Head Start, and various school-related programs. Arrangements must be made in Field Experience Office prior to participation.

460 Observation and Participation in Elementary or Secondary Schools (3)

Prereq: perm. *S. Bolden*. Extensive participation in school program extending over period of 1 qtr, designed primarily for students with some classroom teaching experience, especially students from other countries.

461 Student Teaching in Elementary Schools (7)

Prereq: perm. *S. Bolden, staff*. Assigned responsibility for teaching under supervision of master teacher in classroom in K-6 range for 1 qtr, full-time. Concurrent registration in 461, 462, and 465 is required of all elementary education, speech therapy, and special education majors. Concurrent registration in 461, 463, and 465 is required of majors in arts, music, and physical education.

462 Student Teaching in Elementary Schools (6)

Prereq: 461. Continuation of 461. See 461 for description.

463 Student Teaching in Secondary Schools (6)

Prereq: perm. *S. Bolden, staff*. Assigned responsibility for teaching under supervision of master teacher in classroom in 7-12 range for 1 qtr, full-time. Concurrent registration in 463-464-465 is required of all majors in secondary academic areas, home economics, and industrial arts. Majors in art, music, and physical education must register concurrently for 461, 463, and 465.

464 Student Teaching in Secondary Schools (7)

Prereq: 463. Continuation of 463. See 463 for description.

465 Student Teaching Seminar (3)

S. Bolden, staff. Analysis and interpretation of student teaching experience. Problem-centered discussion of major areas of concern directly related to classroom teaching. Structured discussion of unit and lesson planning, evaluation, classroom management, pupil adjustment, effects of recent legislation upon classroom teacher, position procurement, professional ethics, and professional organizations. Concurrent enrollment for 13 qtr hrs credit in student teaching required.

466 Student Teaching for Advanced Students (6-9, max 9)

Prereq: perm. *S. Bolden, staff*. Supervised observation, participation, and limited teaching; open only to elementary education degree candidates and selected secondary education and special education majors with a minimum of 3 yrs of prior teaching experience.

Secondary Education

250 Analysis of Teacher Characteristics and Teaching Tasks (4)

Prereq: PSY 101; admission to teacher education; must be taken concurrently with 250L, 270, and 270L. *M. Johnson, R. Martin, G. Wood, J. Thompson, G. Doston*. Immediate focus on teaching tasks and models, training in systematic observation and analysis, peer teaching, and tools for self-analysis. Recommended that EDCI 275 or PSY 275 be taken concurrently with or following this course.

250L Analysis of Teaching Characteristics and Teaching Tasks Field Experience (2)

Prereq: PSY 101; admission to teacher education; must be taken concurrently with 250, 270, and 270L. *R. Martin, G. Wood, M. Johnson, J. Thompson*. Immediate focus on performance of undergraduate student in act of teaching in secondary school setting. Major emphasis on developing systematic skills in observation and analysis of teaching. Each student will work with cooperating teacher during qtr. Students will teach several micro-teaching lessons in schools. Session will be video-taped so students may analyze their teaching performance while viewing video tapes in clinical setting. Recommended that EDCI 275 or PSY 275 be taken concurrently with or following this course.

270 Studies of the Learner: Development and Exceptionality (3)

Prereq: PSY 101; admission to teacher education; must be taken concurrently with 250, 250L, and 270L or comparable field experience. *P. Hoessli, J. Thompson, R. Martin, G. Wood*. Focus on study of human growth and development, both normal and exceptional, of preadolescents and adolescents. Major emphasis on effect of cognitive, physical, social, and emotional developmental changes on learner and on comprehensive survey of nature and educational needs of exceptional students.

270L Studies of the Learner: Development and Exceptionality Field Experience (1)

Prereq: PSY 101; admission to teacher education; must be taken concurrently with 250, 250L, and 270. *P. Hoessli, J. Thompson, R. Martin, G. Wood, M. Johnson*. Field experience enables students to observe evidence of diversity in cognitive, physical, social, and emotional development during preadolescence and adolescence. Students observe and analyze characteristics of growth and development and exceptionalities in variety of field settings.

351 Middle School and High School Instructional Processes and Curriculum (5)

Prereq: 250, 250L, 270, EDCI 275 or PSY 275, admission to jr standing. *M. Johnson, J. Thompson, A. Clubok*. To ensure that preservice teacher builds large repertory of teaching strategies and techniques. This learning experience will allow preservice teacher to gain sufficient knowledge for selection of appropriate techniques and methods to match learner situation, teacher personality, pupil needs, and subject for enhancement of learning. Preservice teacher must gain knowledge and skills in techniques and strategies for preparing interesting learning situations and stimulating thinking.

415 Cocurricular Programs for Secondary Schools (4)

Prereq: admission to jr standing in teacher education. Comprehensive treatment of school-recognized activities in cocurricular programs, such as school newspaper, honor society, advising clubs and student government, national contests for talented students, etc.

420 Teaching of Reading in the Content Areas (4)

Prereq: 250, 270, EDCI 275 or PSY 275, 351, admission to jr standing. *G. Bates*. Materials, methods, and techniques for teaching adolescent learners of various abilities. Emphasis on diagnosis of reading difficulties and adaptation of materials and teaching

methods for content area instruction. Must be taken concurrently with 420L, and it is recommended that it also be taken at same time student is enrolled in special methods courses, if possible.

**420L Teaching of Reading in Content Areas:
Field Experience Component (1-2)**

Prereq: 250, 270, 351, EDC1 275 or PSY 275, admission to jr standing; must be taken concurrently with 420. *G. Bates*. Field experience to provide practical applications of materials, methods, and techniques of secondary reading instruction as appropriate in various secondary settings. Student will tutor assigned secondary school student in secondary school setting. It is recommended that 420 and 420L be taken at same time student is enrolled in special methods courses, if possible.

**432 Evaluating Pupil Progress in
Secondary Schools (3)**

Test construction, teacher-made tests, standardized tests, and instructional objectives of testing. Test evaluation, score interpretation, and relation of tests to student development.

470 Teaching of Bookkeeping and Basic Business (3)

Prereq: 351 and ACCT 303. (fall) Materials, methods, and techniques in teaching bookkeeping and basic business subjects.

**471 Teaching Mathematics in Middle and
Junior High School (3)**

Prereq: 351. (spring) Organization and methods of teaching subject matter of mathematics curriculum in grades 7 and 8. Number system studied.

472 Teaching of Earth Science (3)

Prereq: 351. (winter) *R. Skinner*. Instructional materials and techniques related to teaching earth science.

478 Teaching of Physical Science (3)

Prereq: 351 and perm. (fall) *R. Mitias*. Instructional materials, classroom methods, sources of lab equipment and supplies, and teaching techniques in physical sciences.

**479 Teaching of the Social Studies in Junior
and Senior High Schools (3)**

Prereq: 351. (fall, spring) *A. Clubok*. Nature, development, purpose, and value of social studies, with emphasis on methods and techniques of instruction. Curriculum reorganization, unit planning, materials of instruction, and evaluation.

490 Studies in Secondary Education (1-5, max 15)

Prereq: perm of dept chairman. Honors students or students seeking honors in secondary education may register for this course.

Special Education

**160 Field Experience in Special Education
(Block I) (1)**

Prereq: PSY 101 and 30 hrs with 2.00 g.p.a. Coreq with 271. *B. Reeves, S. Safran*. Purpose of field experience is to provide training in observational techniques, observations of exceptional children in variety of settings, and simulations of exceptionalities.

**260 Field Experiences in Special Education
(Block II) (2)**

Prereq: special education block I. *L. Jageman*. Taken in conjunction with special education block II courses where practical application of concepts and skills of these courses is provided through field observations and teacher aid experiences with mentally retarded children and/or adults. Different field experience sites will be in county mental retardation class programs, sheltered workshops, residential services, and public school classes for mentally retarded.

**270 Classroom Management of Children
with Problem Behaviors I (3)**

Prereq: special education block I. *S. Sparks*. Develops teacher skills applicable in pre-student teaching, student teaching, and in professional teaching situation. Skills focused on emphasize behavior modification techniques with purpose of reducing behavioral problems, maximizing learning, and increasing pupil and teacher mental health. Procedures used will systematically move from teacher control to shared control with pupils and progressing to pupil self-control techniques.

**271 Introduction to Education of
Exceptional Children and Youth (3) (2S)**

Prereq: Coreq with 160. *P. Hoessli, B. Reeves, S. Safran*. Comprehensive survey of special education programs emphasizing multidisciplinary approach, mainstreaming, and current trends in providing instruction to mentally retarded, learning disabled, behavior disordered, physically disabled, visually impaired, hearing impaired, communication problems, and gifted.

**272 Introduction to Education of Mentally
Retarded Children and Youth (3)**

Prereq: special education block I or perm. *S. Schaaf*. Etiology, diagnosis, classification, learning potential, and general characteristics of retarded child with emphasis on psychosociological impact of retardation upon individual, family, and community.

**360 Field Experiences in Special Education
(Block III) (3)**

Prereq: special education blocks I, II, III. *S. Sparks*. Field-based course operating concurrently with and providing student with opportunities to apply skills and knowledges taught in professional courses in block IV. Done through observation, participation, interview, tutoring, and group teaching in public schools and related agencies where EMR children and youth are taught/trained.

361 Field Experience in Special Education (3)

Prereq: special education block II and jr standing in special education. (winter) *L. Jageman*. Practical application of concepts and skills introduced in courses of special education block IIIb; supervising, evaluating, managing, and teaching moderately and severely mentally retarded pupils. Students will have choice to work with pre-school, school age, or adult retarded.

**370 Classroom Management of Children with
Problem Behaviors (II) (3)**

Prereq: 270, special education block II or perm. *L. Jageman*. Furthers student knowledge and skills essential to working with LD/BD and EMR children/youth. Includes specific individual and group interaction strategies, classroom management, organization, and techniques for effective teacher delivery, presentation, and feedback.

371 Teaching the Preschool Handicapped (3)

Prereq: special education block II or perm. *B. Reeves*. Purpose, organization, and methods utilized for education of handicapped children. Variety of program models and delivery systems covered.

372 Language Development for the Handicapped (3)

Prereq: special education block II or perm. *Staff*. Examination of language acquisition of handicapped children with primary emphasis on mental retardation. Methods and materials in evaluation and training of receptive and expressive oral language and alternative communication modes presented.

**373 Curriculum and Materials
for the Mentally Retarded (3)**

Prereq: special education block I. *L. Jageman*. Philosophy, content, organization, and development of curriculum for mentally retarded with emphasis on preparation of curriculum plans and selection of materials.

374 Language Arts for the Mentally Retarded (4)

Prereq: special education block II. *S. Schaaf*. Organization of methods and materials for teaching all phases of developmental language skills to the retarded.

**375 Social Studies and Science
for the Mentally Retarded (4)**

Prereq: special education block II. *S. Sparks*. Organization and methods of teaching science and social studies to mentally retarded. In addition to selection, planning, and teaching of appropriate units in social studies and science, emphasis is on implementation of current theory and research to strengthen personal-social-vocational adjustment of mentally retarded. This is for EMR pupils in regular and special classrooms.

**376 Mathematics for the Mentally Retarded
and Learning Disabled (4)**

Prereq: special education block III. *K. Sniezek*. Organization, methodology and materials for teaching basic math concepts and skills which have particular relevance to social and vocational adequacy of mentally retarded children and youth at all levels of instruction.

377 Career and Vocational Education for the Handicapped (3)

Prereq: special education block II or perm. *P. Hoessli*. Provides overview of career and vocational options for handicapped persons of all ages. Defines roles of special and regular education personnel in providing career and vocational guidance, training, placement, and follow-up services to promote career and life adjustment of handicapped.

378 Sheltered Workshop Organization (2)

Prereq: special education block II or perm. (fall) *L. Jageman*. Organization and management of sheltered workshop with emphasis on training handicapped client and on production. Training will include evaluation, teaching, supervision, and community placement. Production includes contracts, product design, job layout, assembly, quality control, and work flow.

379 Homemaking and Family Living for the Handicapped (3)

Prereq: special education block II or perm. (alternate winters) *L. Jageman*. Designed to develop understanding of objectives, organization, methods, materials, and programs essential to teaching handicapped persons self-care, homemaking, and family-living skills. Includes structured weekend field experience with adult retarded in residential group home.

400 Introduction to Emotionally Disturbed Children (3)

Prereq: 271, PSY 101, or perm. (winter) Basic understanding of characteristics of emotionally disturbed children. Topics covered include conceptual models of disturbance/abnormal psychology, classification, withdrawal, hyperactivity (attention deficit disorders), aggression, juvenile delinquency, and intervention strategies. Both educational and psychological perspectives emphasized.

401 Teaching the Emotionally Disturbed Child (3)

Prereq: 400 or perm. *S. Safran*. Various methods of educating and treating emotionally disturbed children covered, including psychoeducational techniques, cognitive behavior modification, affective education, behavior management, and identification strategies.

435 Recreation and Physical Education for the Mentally Retarded and Learning Disabled (5)

Prereq: special education block II or perm. *Staff*. Preparation for presenting activities and evaluating mentally retarded and learning disabled children and youth in areas of body mechanics, physical fitness, games of low organization, sports, rhythms, stunts, tumbling, and recreation activities.

460 Field Experience in Special Education (Block V) (3)

Prereq: special education blocks I, II, III, IV. *S. Safran*. Field-based experience designed to provide supervised practical experience through tutoring LD child or youth in public school setting. Field experience includes diagnostic-prescriptive teaching in areas of reading, arithmetic, and language arts.

461 Field Experience in Special Education (2)

Prereq: special education block IVb. (spring) *L. Jageman*. Practical application of concepts and skills introduced in special education block IVb courses; supervision, evaluating, managing, and teaching severely and profoundly multiply handicapped pupils.

473 Education of Severely and Multiply Handicapped Children (4)

Prereq: special education block IIIb or perm. (spring) *Staff*. General behavioral and learning characteristics of severely and multiply handicapped children; strategies for assessment and intervention with particular emphasis on transdisciplinary strategy, curricula materials, and methods of instruction.

474 Introduction to Specific Learning Disabilities (4)

Prereq: special education block III and 75 hrs or perm. *B. Reeves*. Provides comprehensive overview of field of learning disabilities; introduces varied theories, controversies, and practices; discusses disciplines contributing to field, theoretical, and practical concepts of identification and diagnosis, specific learning disabilities, learning disabled adolescent, early identification, educational provisions, and impact on parents and family.

475 Education of the Trainable Retarded (4)

Prereq: special education block II or perm. (winter) *Staff*. Classification, learning potential assessment, organization of curricu-

lum, educational materials, teaching methodology, and programs for moderately mentally retarded.

476 Teaching the Learning Disabled (4)

Prereq: special education block IV. *S. Safran*. Provides training in strategies for teaching learning disabled students; developing individual diagnostic-prescriptive programs; utilizing specific instructional methodologies and materials; developing individual education programs; organizing instruction in LD classrooms; and evaluating student progress.

477 Communicating with Parents of Exceptional Individuals (3)

Prereq: special education block IV or IIIb or perm. *Staff*. Designed to develop understanding of stresses of parenting exceptional child and how to establish professional relationship with parents so as to strengthen parent effectiveness and involvement. Includes overview of communication techniques, professional roles, and community resources.

478 Education of the Disadvantaged and Handicapped (3)

Prereq: admission to jr standing in teacher education. *Staff*. Problems and new approaches to education of disadvantaged children handicapped through intellectual, sensory, perceptual, and communication deficits due to environmental factors.

481 Management of Medical and Physical Problems in the Classroom (3)

Prereq: special education block IIIb or perm. (spring) Understanding medical conditions and terminology pertinent to reading accumulative folder information, communicating with parents and interdisciplinary team members and in planning and implementing Individualized Habilitation Plan. Classroom procedures to use with children having ostomies, shunts, pacemakers, glasses, hearing aids, braces, seizures, medication, etc. emphasized.

485 Diagnosis and Evaluation of the Handicapped (3)

Prereq: special education blocks I, II, III. *S. Schaaf*. Designed to have student learn types, purposes, and appropriateness of various testing and evaluation tools and techniques. Moreover, covers analysis, interpretation, and reporting of assessment information.

490 Study of Special Education (1-5, max 15)

Prereq: perm of area coordinator. Independent analysis of problems, special interests, concerns, with assigned and suggested readings, programmed experiences, and preparation of final report, with guidance of staff member.

ELECTRONICS TECHNOLOGY

The following courses for the A.A.S. program in electronics technology are available only on the Lancaster campus.

133 Basic Electronics (5)

Prereq: 1 yr h.s. algebra or perm. Provides student with introductory knowledge of electricity and solid state electronics. Basic electrical terms, units, symbols, schematics, and code. Fundamentals of alternating current and direct current electricity. Ohm's Law applied to series and parallel networks. Inductance and capacitance theory. Test equipment used for troubleshooting. Fundamentals of solid state theory and application. Operating characteristics of diodes, transistors, and I.C.s. Concludes with introduction to computers and microprocessors. Field trips part of lab activity. 3 lec, 4 lab.

134 Direct Current Circuit Analysis (5)

Prereq: 133. Direct current electrical theory, application, and circuit analysis. 3 lec, 4 lab.

135 Alternating Current Circuit Analysis (5)

Prereq: 134, MATH 118, or perm. Alternating current electrical theory, application, and circuit analysis. Sinusoidal wave forms, inductive reactance, resonance circuits, and RC circuits. Power transformers and polyphase systems. Power generation and distribution. 3 lec, 4 lab.

136 Electrical Motors, Control Circuits, and Computers (5)

Prereq: 135 or perm. Industrial power rotating machines and computer control. Motor principles, classification, and applica-

tion. Motor control circuits, single phase, 3-phase systems, relays, and overload protection. Testing and maintenance procedures. Field trips part of lab activity. 3 lec, 4 lab.

138 A.C. and D.C. Circuit Analysis (6)

Prereq: 133, MATH 118, or perm. A.C. and D.C. electrical circuits. Application of network theorems to circuits containing resistors, capacitors, inductors, and transformers emphasized.

140A-J Power Distribution Systems (1-5, max 5 each segment)

Prereq: 135 or perm. (A) residential electrical wiring, (B) commercial electrical wiring, (C) industrial electrical wiring, (D) National Electrical Code, (E) low voltage wiring, (F) high voltage systems, (G) fire alarm systems, (H) electrical safety, (I) electrical blueprints and specifications, (J) new developments in power distribution.

200 Testing and Repair of Electronic Equipment (3)

Prereq: 235 or perm. Fundamentals of test equipment applications with emphasis on repair of consumer and industrial equipment. 1 lec, 4 lab.

233 Solid State Devices (6)

Prereq: 135 or perm. Advanced study of solid state devices, their operating characteristics, and circuit analysis. Transistor amplifiers, bias, impedance matching and classes of operation, integrated circuit theory, and application. 3 lec, 6 lab.

234 Industrial Electronics and Linear Integrated Circuits (5)

Prereq: 233 or perm. Theory and application of solid state industrial control. Silicon control rectifiers, photoelectric, differential amplifiers, oscillators, and phase shift controls. Field trips part of lab activity. 3 lec, 4 lab.

235 Digital Electronics (6)

Prereq: 234 or perm. Comprehensive study of pulse and digital circuits used in industry. Wave shaping, switching circuits, trigger circuits, nonsinusoidal oscillators, and sequencing systems. Digital concepts, Boolean algebra, logic circuits, memory circuits, arithmetic unit, and logic application to electronic control circuits. Field trips part of lab activity. 3 lec, 6 lab.

236A Microprocessor and Computer Basics (6)

Prereq: 235 or perm. Introduction to computer organization and design, including ROMs, RAMs, microprocessors, instruction sets, hardware, interfacing, software, and machine and assembly language programming. 3 lec, 6 lab.

236B Microprocessor and Computer Basics (6)

Continuation of 236A.

236C Robotics (6)

Prereq: 236B or perm. Introduction to fundamentals of robotics. 3 lec, 6 lab.

237 Design and Production of Electronic Circuits (3)

Prereq: 133 and IT 101 or perm. Printed circuit theory, design, application, and fabrication. 2 lec, 2 lab.

240A-M Electronic Communication Systems (3-5)

Prereq: 233 or perm. Introduction to various types of communication systems. Includes microwave, R. F., television, audio, and sound systems.

250 Computer Programming for Electronic Circuit Analysis (3)

Prereq: 233, MATH 118, or perm. Introduction to high-level language programming for solution of electronic circuit problems. 2 lec, 2 lab.

299 Special Problems (1-3, max 9)

Prereq: perm. Individualized projects or internship experiences under supervision of faculty member in electronics technology.

ENGINEERING, CHEMICAL

200 Introduction to Chemical Engineering (4)

Prereq: CHEM 122 or 142, MATH 263A. (fall, spring) Applications of chemistry, physics, and mathematics to solution of material and energy balances typical of those encountered in process industries. 3 lec, 2 lab.

302 Chemical Engineering Thermodynamics and Kinetics (5)

Prereq: 200 (C or better). (fall) Application of thermodynamics to chemical engineering problems, including problems in chemical equilibrium in homogeneous and heterogeneous systems, mixtures, and pure materials. Applications of chemical kinetics to design of chemical reactor systems. 5 lec.

303 Chemical Engineering Thermodynamics and Kinetics (4)

Prereq: 302. (winter) Continuation of 302. See 302 for description. 3 lec, 2 lab.

304 Chemical Engineering Thermodynamics and Kinetics (4)

Prereq: 303, MATH 340. (spring) Continuation of 302-303. See 302 for description. 3 lec, 2 lab.

331 Principles of Engineering Materials (4)

Prereq: CHEM 122 or 142. (fall, spring, summer) Fundamental principles underlying behavior of engineering materials. Relationship between structure and properties of ceramic, metallic, and polymeric materials. 4 lec.

342 Unit Operations I (5)

Prereq: 200 (C or better), MATH 340. (fall) Fundamental principles of fluid flow, heat, and mass transfer.

343 Unit Operations II (4)

Prereq: 342, 344. (spring) Stagewise processes including distillation and extractions. 3 lec, 2 lab.

344 Unit Operations III (5)

Prereq: 342. (winter) Continuation of 342. See 342 for description. 4 lec, 2 lab.

363 Chemical Engineering Lab I — Synthesis and Analysis I (3)

Prereq: 342, MATH 340. (winter) Lab emphasizing use of digital computers for analyzing chemical engineering problems. 1 lec, 2 lab.

400 Applied Chemical Engineering Calculations (5)

Prereq: 363, MATH 340. (spring) Solution of ordinary differential equations of chemical engineering, numerical methods, Laplace transforms, computer synthesis and analysis, unsteady heat transfer, partial differential systems.

415 Chemical Engineering Lab III (3)

Prereq: 343, 344, sr rank. (winter) Lab practice to illustrate principles of selected unit operations, thermodynamics, and applied kinetics; and to aid student in gaining confidence in handling of chemical engineering equipment. Development of ability to devise and conduct chemical engineering experiments with minimum supervision and to report results satisfactorily stressed.

416 Chemical Engineering Lab IV (3)

Prereq: 343, 344, sr rank. (spring) Continuation of 415. See 415 for description.

417 Chemical Engineering Lab V (2)

Prereq: 416, 442. (winter) Continuation of 442. 2 lec, 2 lab.

418 Chemical Engineering Lab VI — Materials (2)

Prereq: 331. (fall, winter, spring, summer) Demonstrations and experiments supporting relationships which exist between structure and properties of ceramic, metallic, and polymeric materials. 4 lab.

419 Chemical Engineering Lab VIII — Advanced Materials (1-3)

Prereq: perm. Individual and small group investigation of advanced problems involving chemical, mechanical, physical, or design parameters of materials, materials structure, or fabrication. Investigations may involve ceramics, metals, polymers, or composites. 2 lab for each hr of credit.

421 Unit Processes (3)

Prereq: 344, with 344, or perm. (winter) Typical inorganic and organic processes, with emphasis on application of thermodynamic and kinetic theory and on raw material and energy sources, to design and operation of these processes. 3 lec.

430 Metallic Corrosion (4)

Prereq: 331. (spring) Basic principles of corrosion including electrochemical foundation, influence of environment, stress, strain, and structure. Selected lab experiments. 4 lec.

433 Physical Metallurgy (4)

Prereq: 331. Mechanisms, kinetics, and crystallography of reactions in metallic solids. Selected lab experiments for illustration of principles. 4 lec.

442 Process Control and Simulation (4)

Prereq: 343, 344, sr rank. (fall) Simulation and control of chemical processes. Feedback control using root loci and Bode diagrams covered. 3 lec, 2 lab.

443 Chemical Engineering Design (5)

Prereq: 304 or perm. (fall) Preliminary process design of chemical plant and its economic evaluation plus additional detail design problems. Involves trip, which usually lasts 3 days, to various chemical plants. Student responsible for own expenses on this trip. 3 lec, 2 rec.

444 Chemical Engineering Design (4)

Prereq: 443. (winter) Continuation of 443. See 443 for description.

445 The Application of Engineering Design to the Environment (3)

Prereq: 443 or perm. Use of chemical engineering fundamentals to approach socially significant problem. Students expected to research problem and come up with definite specific solutions which they will then evaluate. 3 lec.

452 Introduction to Transport Phenomena (3)

Prereq: 344, 400. Heat, mass, and momentum transfer from theoretical viewpoint. Presentation of boundary-layer theory and its comparison with other theoretical and semi-theoretical approaches. 3 lec.

460 Atmospheric Pollution Control (3)

Prereq: 303 or ME 321 or perm. Sources of air pollution from major industries, internal combustion engines, and other sources. Techniques available for measuring particulate and gaseous pollutants in atmosphere and at their sources. Techniques available for control and future possibilities for control of air pollution. Bases for air pollution legislation. 3 lec.

471 Physical Chemistry of Macromolecules (3)

Prereq: CHEM 454. Effects of structure and molecular weight on physical and chemical properties of macromolecules. Topics include molecular weight distribution, solubility, polymer conformation, different types of polymers, synthesis and reactions. Both synthetic and natural polymers considered.

474 Introduction to Polymer Engineering (4)

Prereq: 342 and 471 or 477 or perm. For students with little or no experience in production and fabrication of polymeric materials. Emphasis on subjects of melt rheology, extrusion, and injection molding of polymeric materials.

477 Introduction to Polymer Synthesis (4)

Prereq: CHEM 305 or with CHEM 305; or perm. To develop thorough understanding of mechanisms, kinetics, and systems used for synthesis of polymeric materials. Effect of synthesis variations upon properties and reactor design also discussed.

480 Colloquium (1)

Prereq: sr rank. (winter) Lectures, mainly by speakers outside engineering field, on cultural and professional subjects, with discussion moderated by speakers. 1 lec.

490 Special Investigations (1-3, max 9)

Prereq: perm. Individual or small-group work, under staff guidance, in research or advanced study in particular field of chemical engineering.

491 Chemical Engineering Honors (1-18, max 20)

Prereq: 3.5 accum or above, satisfactory departmental evaluation of potential. Independent departmental honors research resulting in thesis. Credit/noncredit.

ENGINEERING, CIVIL**210 Plane Surveying (4)**

Prereq: ET 180 or perm. (fall, spring) Basic theory and field practice in measurement of distance, elevation, and angle; introduction to photogrammetry. 3 lec, 3 lab.

220 Statics (4)

Prereq: MATH 263C or with 263C. Laws of equilibrium of forces, friction, centroids, and moment of inertia. Not open to srs. 4 lec.

222 Strength of Materials (4)

Prereq: grade of C or better in 220. Simple stresses and strains, bending, torsion, beam deflection, columns, and combined stresses. 4 lec.

223 Strength of Materials Laboratory (1)

Prereq: 222 or with 222. Testing of various materials under axial compression, tension, flexure, torsion, impact, fatigue. Use of electrical, mechanical, and photoelastic strain measuring equipment. 2 lab.

311 Route Engineering (4)

Prereq: 210. (winter) Horizontal and vertical curves; geometric design of highways; earthwork distribution; introduction to engineering economy. 4 lec.

330 Structural Theory I (5)

Prereq: minimum grade of C or better in 222, ET 240. (fall) Determinacy requirements for beams, frames, and trusses; shear and bending moment diagrams for beams and frames, truss analysis using method of joints, sections, and graphics; influence line calculations for beams and trusses; deflection calculations for statically determinate trusses. Statical and kinematic indeterminacy. Fundamentals of statically indeterminate analysis of trusses, beams, and frames. 3 lec, 2 tutorial.

331 Structural Theory II (3)

Prereq: minimum grade of C in 330. (winter) Indeterminacy conditions for beams, frames, and trusses; general method of analysis; moment distribution method; slope deflection method; conjugate beam method; force method; displacement method; computer applications. 3 lec.

340 Fluid Mechanics (5)

Prereq: grade of C or better in ME 224. Statics and dynamics of viscous and nonviscous fluids, dimensional analysis and similitude, 1-dimensional gas dynamics, pipe flow, principles of lift and drag, introduction to boundary layers. 5 lec.

341 Fluid Mechanics Laboratory (1)

Prereq: 340 or with 340. Lab techniques, calibration principles, fluid and flow measurements. 2 lab.

342 Applied Hydraulics (3)

Prereq: 340. (spring) Flow and pressure distribution in multiloop networks, dynamics of flow in pumps and turbines, uniform and nonuniform flow in open channels, culvert hydraulics, hydraulic transients. 2 lec, 2 lab.

343 Hydrology (3)

Prereq: 340, ISE 304 or with ISE 304. (spring) Hydrologic cycle. Precipitation and runoff data; groundwater hydraulics; infiltration; peak runoff calculations. Application to water resource problems. 3 lec.

361 Transportation Engineering (4)

Prereq: 311. (spring) Comparative analysis of various modes of transportation, with emphasis on inherent advantages and disadvantages of each; planning process applied to transportation facilities. 4 lec.

370 Soil Engineering (4)

Prereq: C or better in 222, and GEOL 283. (winter) Soil compositions, physical and chemical properties, and classifications; water movement and seepage problems; consolidation and shear strength; applications to earth structures, retaining walls, slope stability, bearing capacity, and settlement. May be taken as 570 for grad credit except by civil engineers. 3 lec, 2 lab.

410 Surveying II (3)

Prereq: 210. (spring) Triangulation; astronomical observations; land surveying; instrument adjustments; special topics. 2 lec, 3 lab.

415 Photogrammetry (3)

Prereq: 210 or perm. (winter) Equipment and methods used in aerial photography and land measurement. 2 lec, 2 lab.

420 Finite Element Methods (3)

Prereq: perm. (fall) Background theory, formulation and application to 1- and 2-dimensional problems and techniques for analysis of structures, soil consolidation, and wave propagation. Grad-level course open to selected undergrads. 3 lec.

423 Continuum Mechanics (4)

Prereq: perm. (spring) Matrix methods in mechanics and structures; laws of dynamics; mechanical properties of solids and fluids, basic theories of continuum mechanics. Grad-level course open to selected undergrads. 4 lec.

424 Strength of Materials II (3)

Prereq: C or better in 222. (fall) Unsymmetrical bending, shear centers, columns, and continuation of basic topics usually taught in Strength of Materials I. 3 lec.

425 Advanced Strength of Materials (4)

Prereq: perm. (fall) Advanced treatment of theories of failure, stresses, and strains at a point, cross shear, unsymmetrical bending, curved beams, torsion, thick-walled cylinders, finite elements. Grad-level course open to selected undergrads. 4 lec.

426 Theory of Stability (3)

Prereq: perm. (winter) Buckling of columns, beam columns, plates, and rings. Grad-level course open to selected undergrads. 3 lec.

427 Experimental Stress Analysis (3)

Prereq: 424 or 425. (spring) Experimental methods of stress determination including photoelasticity, stress coat, and electric strain gauge techniques; stress analogies; strain rosettes for combined stress determinations. Grad-level course open to selected undergrads. 2 lec.

428 Theory of Elasticity and Applications (3)

Prereq: perm. (fall) Equations of equilibrium and compatibility; stresses and strains in beams, curved members, thick cylinders, and structural member torsion. Grad-level course open to selected undergrads. 3 lec.

429 Mathematical Theory of Elasticity (3)

Prereq: 428. (winter) Fundamental equations and problems of elasticity theory; methods of stress functions and displacement potentials; finite element applications. Grad-level course open to selected undergrads. 3 lec.

432 Structural Design in Concrete (4)

Prereq: minimum grade of C in 330. (winter) Materials and properties; design methods, strength of rectangular sections subject to bending moments, axial loads, and shear forces either separately or in combination; continuity in concrete construction; design of 1-way slabs; design of T-sections in bending; deflection calculations; footing design. 3 lec, 1 tutorial.

433 Structural Design in Steel (4)

Prereq: minimum grade of C in 330. (spring) Materials and properties; design methods, design of tension members; structural fasteners; welding; design of compression members; design of beams; design of connections; design of trusses; design of frames; plastic design of beams and frames. 3 lec, 1 tutorial.

434 Structural Design (3)

Prereq: minimum grade of C in 330. (spring) Design of complete structures or major components of structures. 3 lec.

435 Advanced Structural Theory (4)

Prereq: perm. (winter) Finite difference solutions of beams; numerical integration solutions for beams; buckling solutions using numerical integration; plate solutions using numerical methods; column analogy method; energy methods; computerized applications; analysis of folded plates; analysis of cylindrical shells; elements of structural dynamics. Grad-level course open to selected undergrads. 4 lec.

437 Advanced Structural Design (4)

Prereq: perm. (spring) Designer, codes, and contracts; connections in concrete design; jointing in concrete construction; connections in steel design; design of slender columns in concrete and steel; design of columns for biaxial bending; design of multi-story concrete and steel-framed building; design of concrete and steel beams for torsion; design of 2-way slab systems; design of masonry structures. Grad-level course open to selected undergrads. 4 lec.

443 Open Channel Hydraulics (3)

Prereq: perm. (spring) Principles of uniform and varied flow. Channel design for uniform flow, gradually varied flow profiles, channel transition, hydraulic jumps, flow in prismatic and non-prismatic channels. Grad-level course open to selected undergrads. 3 lec.

446 Potential Flow Theory (3)

Prereq: perm. (fall) Inviscid flow theory. General equations of fluid dynamics, study of potential flow. Grad-level course open to selected undergrads. 3 lec.

447 Viscous Flow Theory (3)

Prereq: perm. (winter) Mechanics of fluid resistance, laminar and turbulent flow. Applications to external boundary layer flow and to flow in ducts. Grad-level course open to selected undergrads. 3 lec.

450 Water Treatment (3)

Prereq: 342-343, CHEM 123. (fall) Sources and collection of public water supplies; principles of treatment processes. 3 lec.

451 Wastewater Treatment (3)

Prereq: 342, 343, CHEM 123. (winter) Quantities and collection of municipal wastewater; principles of treatment processes. 3 lec.

452 Water and Wastewater Analysis (3)

Prereq: CHEM 123. (fall) Lab methods and interpretation of results for chemical and bacteriological examination of water and wastewater. 2 lec, 3 lab.

455 Water Treatment II (4)

Prereq: 450, 452, perm. (winter) Theory; design of treatment units; lab experiments demonstrating basic principles. 3 lec, 3 lab.

456 Wastewater Treatment II (4)

Prereq: 451, 452, perm. (spring) Theory; design of treatment units; lab experiments demonstrating basic principles. 3 lec, 3 lab.

457 Water Resources Engineering (3)

Prereq: 343 or perm. (winter) Elective sr civil engineering course designed to provide integrated treatment of water resources engineering, including hydrological measurements, runoff, ground water, water law, reservoir design, frequency analysis, planning, flood control. Grad-level course open to selected undergrads. Systems approach to multi-purpose water resource projects emphasized. 3 lec.

458 Water Quality Engineering (3)

Prereq: perm. (spring) Natural and man-made characteristics of water quality, changes in quality resulting from use, criteria for control of stream pollution, methods of improving water quality, also legal, economic, and institutional aspects. Grad-level course open to selected undergrads. 3 lec.

462 Traffic Engineering (3)

Prereq: 361, nonmajors by perm. (winter) Vehicle and driver characteristics, uses of traffic control devices, intersection design and capacity, parking characteristics. 3 lec.

463 Traffic Parameters (4)

Prereq: perm. (fall) Vehicle-highway relationships, including vehicle performance and highway geometry. Consideration of highway capacities and their influence on design. Grad-level course open to selected undergrads. 4 lec.

464 Transportation Data Methods (4)

Prereq: perm. (winter) Introduction to traffic survey methods, data collection, and evaluation. Topics include origin-destination, speed, parking, accident, and future development studies. Grad-level course open to selected undergrads. 4 lec.

465 Traffic Regulations and Controls (4)

Prereq: perm, 463. (spring) Typical traffic ordinances and regulations and their utilization to control traffic through use of signs, markings, and control devices. Traffic signals, including their use as single units or as progressive series. Grad-level course open to selected undergrads. 4 lec.

467 Traffic Studies I (1-4)

Prereq: 464. (spring) Practical problems relating to traffic surveys and data analysis. Grad-level course open to selected undergrads.

468 Traffic Studies II (1-4)

Prereq: 465. (winter) Practical problems relating to vehicular characteristics and traffic movements. Grad-level course open to selected undergrads.

471 Foundation Engineering (3)

Prereq: 370. (fall) Design and construction problems in soil engineering; subsurface investigation, foundation selection and design criteria; principles of design of shallow and deep foundations, site improvement. 3 lec.

472 Soil Mechanics I (3)

Prereq: perm. (fall) Water movement through soil, construction and interpretation of flow nets. Elastic equilibrium and stress distributions. Compressibility and settlement of cohesive and noncohesive soil; consolidation theory. Grad-level course open to selected undergrads. 2 lec, 2 lab.

473 Soil Mechanics II (3)

Prereq: 472. (winter) Stability of footings (bearing capacity), retaining walls, and slopes. Grad-level course open to selected undergrads. 2 lec, 2 lab.

474 Soil Mechanics Laboratory (1)

Prereq: perm. (spring) Advanced techniques for measurement of soil engineering properties. Grad-level course open to selected undergrads. 3 lab.

475 Advanced Foundation Engineering (3)

Prereq: perm. Design of shallow and deep foundations for complex or unusual soil conditions; design of earth retaining structures including retaining walls, cofferdams, and sheetpile bulkheads; site improvement; performance evaluation and instrumentation. Grad-level course open to selected undergrads. 3 lec.

481 Pavement Design (3)

Prereq: perm. (spring) Types and uses of various paving materials and mixtures; theory and practice in design, construction, and maintenance of various types of highway and airport pavements. 2 lec, 2 lab.

482 Paving Materials and Mixtures (3)

Prereq: perm. (winter) Types, constituents, chemical behavior, tests, specifications, and uses of bituminous materials, Portland cements, and aggregates in pavements. Design and manufacture of paving mixtures and construction of pavements. Grad-level course open to selected undergrads. 2 lec, 3 lab.

490 Special Investigations (1-5)

Prereq: perm. (fall, winter, spring, summer) Special investigation or problem not covered by formal courses. Permits well-qualified student to pursue individual study under direction of faculty member.

ENGINEERING, ELECTRICAL AND COMPUTER

NOTE: In the following course descriptions an asterisk (*) denotes that a minimum grade of C is required in prerequisite course.

111 Consumer Electronics (2)

(fall, spring) Provides useful purchasing and other decision-making information such as explanations of specifications, and descriptions of operation of consumer-grade high-fidelity equipment. Topics included are audio amplifiers, pre-amplifiers, loud-speaker systems, phonographs, phono cartridges, AM and FM tuners, receivers, tape decks, tape selection, headphones, noise reduction systems.

150 Electronic Arts in Music (2) (2A)

(fall, spring) Survey of range of electronic techniques used in reproduction and synthesis of musical sounds. Basic acoustics, music amplifiers, analog and digital music synthesizers, computer music, keyboard electronic instruments, and trends in musical instrument engineering covered with selected demonstrations of hardware.

210 Circuit Analysis I (4)

Prereq: MATH 263B*. (fall, winter) Basic concepts and definitions, units, DC circuit analysis, Kirchhoff's laws, source transformations, mesh and nodal analysis, network theorems, magnetic circuits. 3 lec plus 2 hrs computation.

211 Circuit Analysis II (4)

Prereq: 210* and MATH 263C. (winter, spring) Continuation of 210. Inductance and capacitance, DC transients, periodic functions, average and RMS, complex numbers, phasors, sinusoidal steady state circuit analysis. 3 lec plus computation.

212 Circuit Analysis III (4)

Prereq: 211* and MATH 340. (fall, spring, summer) Continuation of 211. AC network theorems, coupled circuits, frequency response, polyphase circuit analysis. 3 lec plus computation.

221 Instrumentation and Computation Laboratory II (3)

Prereq: 210 and/or with 211. (winter, spring) Theory and applications of lab instruments. Lab experimentation involving electrical and magnetic phenomena.

222 Introduction to Digital Circuits (3)

Prereq: 210*, ET 240. (spring) Fundamentals of Boolean algebra; binary arithmetic; characteristics and applications of logic gates and flip-flops; introduction to microcomputers.

232 Analytical Foundations of Electrical Engineering (5)

Prereq: 211*, MATH 340, ET 240. (spring, summer, fall) Vector analysis with applications to electromagnetic fields. Matrix theory with applications to state variable formulation of linear and nonlinear systems. Complex variable theory with applications to systems, in preparation for Laplace transforms, etc. Special analytical techniques for solution of complex electrical engineering problems with emphasis on computer-oriented techniques.

241 Remote-Access Applications in Electrical Engineering (2)

Prereq: ET 240. (winter) Use of remote-access facilities in FORTRAN applications. Customized command generation using CMS EXEC processor. FORTRAN advanced programming and debugging techniques.

301 Intermediate Laboratory I (1)

Prereq: concurrent with 340. Intermediate-level lab in practical electronics designed to provide exposure to devices and circuits discussed in corequisite lecture course.

302 Intermediate Laboratory II (1)

Prereq: 301. Continuation of 301.

303 Intermediate Laboratory III (1)

Prereq: 331. (spring and fall) Experiments in energy conversion including transformers and rotating machinery.

304 Basic Electrical Laboratory I (1)

Prereq: 313. Lab supplement to 313. Basic instruments and circuit measurements.

305 Basic Electrical Laboratory II (1)

Prereq: 304 and 314. Lab supplement to 314. Operation of semiconductor devices, amplifier design, oscillators and digital circuits design.

310 Linear Systems and Networks I (4)

Prereq: 212*. (fall, winter) Classifications of systems and signals, basis functions, singularity functions, convolution integral, Fourier series and transforms, Laplace transformation with associated theorems. Students assigned to use digital computer for solving Fourier series problem and therefore they should have some knowledge of FORTRAN programming.

312 Linear Systems and Networks II (4)

Prereq: 232*, 310. (spring, fall) 2-port networks and parameters, difference equations, Z-transforms, state equations and their formulation, time domain solution of state equations, signal flow graphs.

313 Basic Electrical Engineering I (3)

Prereq: MATH 263B. DC, steady-state single phase AC, 2-port network analysis, frequency and transient response. Not open for credit to electrical engineering majors. 3 lec.

314 Basic Electrical Engineering II (3)

Prereq: 313. Semiconductor devices, small-signal analysis, amplifiers and oscillator circuits, pulse and digital circuits. 3 lec.

315 Basic Electrical Engineering III (3)

Prereq: 313. Transformers, direct current machines, polyphase induction and synchronous, rotating machines, including equivalent circuits and steady state performance prediction.

320 Distributed Circuits (2)

Prereq: 212. Basic equations, propagation of DC transients and pulses on lossless transmission lines, steady-state waves on lossless and lossy lines, Smith chart for impedance and admittance, impedance matching.

321 Electromagnetics and Materials I (4)

Prereq: 212*, 232*. (winter, spring) Introductory treatment of static electric and magnetic fields in free space and stationary matter and physical properties of fields, charges, and currents. Included

are: electromagnetic field vectors and field equations, boundary conditions, Poisson's equation, solutions of Laplace's equation for scalar electric and magnetic potentials, vector potential, polarization and magnetization charges and currents, and unified macroscopic treatment of fields in matter. Electromagnetic energy.

322 Electromagnetics and Materials II (4)

Prereq: 321. (spring, summer, fall) Continuation of 321. Discussion of time-varying, electromagnetic fields. Application of field theory to solution of problems from various branches of electrical engineering with emphasis upon physical interpretation. Included are: relation of field theory to circuit theory, Poynting's theorem, stored energy and power flow, complex fields and power, TEM waves, uniform plane wave, wave reflection and refraction.

330 Energy Conversion I (4)

Prereq: 212*, ET 240. (fall, winter) Principles of energy conversion utilizing both electrostatic and electromagnetic forces. Properties of magnetic materials including study of eddy-current and hysteresis effects. Single phase and polyphase transformers theory and applications.

331 Energy Conversion II (4)

Prereq: 232*, 330. (winter, spring) Direct current generators and motors, revolving field theory; polyphase induction motors including motor theory and equivalent circuits. Synchronous alternator and motor theory including synchronous condenser applications for power-factor correction.

340 Electronics I (4)

Prereq: 212*, 222, PHYS 252. (fall) Introduction to semiconductor properties, devices, and applications. Formation of n- and p-type materials, junctions. Properties of diodes and bipolar transistors. Application of semiconductor devices to digital circuits. Introduction to combinational and sequential logic.

341 Electronics II (4)

Prereq: 232*, 340. (winter) Continuation of 340. Application of semiconductor devices to analog circuitry. Small-signal parameters, low-frequency amplifier design, feedback amplifiers, frequency response. Large-signal amplifiers and power supplies.

381 Internship in Electrical Engineering (1-3)

Prereq: jr rank and perm. (fall, winter, spring, summer) Supervised work-study program, in electrical engineering profession, in established industrial environment. Credit dependent on advanced registration and mutual agreement between faculty supervisor and participating company. May be repeated; however, hrs applied for graduation limited by dept.

401 Advanced Laboratory I (1-3)

Prereq: 302. (fall, winter, spring) Advanced lab format follows that of intermediate lab. Student-proposed projects are design- or research-oriented and directed by faculty member specializing in area of investigation. Portion of this lab required in conjunction with certain electrical engineering 400-level lecture courses. Student taking 400-level electrical engineering courses must register for minimum of 1 credit hr of advanced lab per qtr — 5 credit hrs of advanced lab required for graduation.

402 Advanced Laboratory II (1-3)

Prereq: completion of jr lab requirement. (fall, winter, spring) See 401 for description.

403 Advanced Laboratory III (1-3)

Prereq: completion of jr lab requirement. (fall, winter, spring) See 401 for description.

405 Physical Electronics (3)

Prereq: 340. (fall) Simplified 1-dimensional band theory of solids. Valence and conduction band occupancy from Fermi-Dirac statistics. Hole conduction and doping. Derivation of PN junction volt-amp-temperature characteristic. DC and AC characteristics of junction transistors derived from fundamentals.

406 Advanced Analog Circuits (3)

Prereq: 312, 341, 301, and 302. (spring) Advanced analog circuitry. Operational amplifiers, characteristics, limitations. Linear and nonlinear applications. Feedback, stability criteria, compensation, time, and frequency response. Waveform generation and shaping, timing, comparison, arithmetic operations.

407 Advanced Digital Circuits (3)

Prereq: 312, 341, 301, and 302. (fall) Advanced digital circuitry. Basic logic operations, digital device families, and characteris-

tics. Arithmetic, counting, memory, other MSI and LSI functions. Numeric display devices. Analog/digital conversion.

408 Small Microprocessor Systems (3)

Prereq: 407 and 467. (winter) Essential hardware and architecture of small microprocessor systems. Content introduced through case study of small 8085-based system which students may construct. Monitor program functions and software development in model system.

410 Semiconductor Principles I (3)

Prereq: 405 or equiv. (spring) Continuation of 405. Application of semiconductor theory to solid state devices: diodes, transistors, FETs, and Gunn effect devices. Charge control analysis. Ebers-Moll equations. Electro-optical effects.

411 Passive Filter Synthesis (3)

Prereq: 312 and 232. (fall) Principles of filter synthesis, positive-real functions, synthesis of 1-port networks, synthesis of 2-port networks, approximation, frequency transformations, and filter design.

412 Active Filter Synthesis (3)

Prereq: 411. (winter) Principles of active filter synthesis, active filter elements, realization of active 2-port networks, multiple feedback filters, explicit formulas and practical filter design, and active filter design using optimization.

413 Digital Filter Design (3)

Prereq: 412. (spring) Principles of digital filter design, Z-transform, discrete Fourier transform, representations of digital filters, digital filter hardware implementations, and computer-aided design of digital filters.

425 Automatic Control I (3)

Prereq: 312. (fall) Formulation of linear models for lumped-parameter physical systems, fundamental principles of closed-loop control, signal flow graphs, Routh-Hurwitz criteria; Root locus method, Bode plots; introduction to control system using Root locus and Bode plots.

426 Automatic Control II (3)

Prereq: 425. (winter) Nyquist stability criterion, Nichols charts, cascade and feedback compensation, frequency domain performance specifications, minor loop design.

427 Automatic Control III (3)

Prereq: 426. (spring) Sampled-data systems, Z-transforms, sampled-data system design using digital compensators; carrier control systems; state-space concepts, designing of control systems using state variable feedback.

440 Microwave Theory and Devices (3)

Prereq: 322 and 320. (fall) Wave propagation, transmission lines, Smith chart, impedance matching, waveguides, survey of devices (microwave generators, semiconductor devices, etc.)

441 Antennas (3)

Prereq: 322. (winter) Fundamental concepts and definitions, radiation integrals and potential functions, linear wire antennas, loops, arrays, matching techniques, antenna measurements, lab demonstrations.

443 Electromagnetics I (3)

Prereq: 322, 320. (fall) Mathematical review of vector operations in Cartesian and curvilinear coordinates. Solution of wave equation in Cartesian coordinates and application to wave reflection from interfaces between general media. Decomposition of wave solutions into TE, TM, and TEM waves, with application to waveguides and transmission lines; solution of wave equation in cylindrical coordinates, with application to circular waveguide, radiation from line sources, and scattering from cylindrical objects.

446 Introduction to Radar and Aircraft Navigation Systems (3)

Prereq: 322. (spring) Discussion of radar as applied to aviation requirements of surveillance, approach and landing, weather avoidance; presentation of principles of VOR, DME, RNAV, ILS, ADF, Loran, Omega.

447 Introduction to Avionics (3)

Prereq: 446 or perm. Intermediate study of radiation patterns and modulation techniques required for UHF/VHF aircraft communications and enroute and approach guidance. Extension of VHF instrument landing systems (ILS) to microwave landing system (MLS) presented.

450 Power System Analysis (3)

Prereq: 331. (winter) Bus admittance matrix, load flow problem and its solution with use of Gauss-Seidel and Newton-Raphson methods, power flow control. Stability problem, swing equation, equal area criterion, numerical solution for swing curve. Students assigned to use digital computer for solving load flow and stability problem.

451 Symmetrical Components (3)

Prereq: 331, 450. (fall) Circuits analysis by symmetrical components, representation of unbalanced polyphase currents and voltages by component symmetrical sets, solutions of faults on power systems, unbalanced operation of power equipment, single-phase induction motor analysis.

452 Power Transmission (3)

Prereq: 331 or perm. (spring) Economic and electrical principles of electrical power lines, mechanical principles of transmission line design and environmental effects.

453 Power Distribution (3)

Prereq: 331 or perm. (spring) Subtransmission systems, distribution substations, primary and secondary distribution; description, specification, application, and selection of conductors, cables, capacitors, circuit breakers, related protective relays, instrument transformers, meters, transformers, fuses, load break switches, isolators, and other elements used in power distribution; arrangements and applications of different types of distribution substations, distribution panels, system grounding, and emergency generation.

458 Power System Stability Studies (3)

Prereq: 331, or perm. (winter) Problems pertaining to stability of large power systems, both synchronous and asynchronous loadings, maximum use of digital computer techniques, and matrix algebra. Student will present paper on individually assigned problems.

461 Digital Systems I (3)

Prereq: 341. (fall) Postulates and fundamental theorems of Boolean algebra; algebraic and map methods for design of combinational logic and simple sequential circuits; logic minimization methods; introduction to system design using shift registers, counters, etc.

462 Digital Systems II (3)

Prereq: 461. (winter) Basic concepts from theory of finite-state machines; analysis and synthesis of sequential circuits; study of state assignment; synchronous and asynchronous machines; system design using integrated circuits.

463 Digital Systems III (3)

Prereq: 462. (spring) Synthesis of sequential circuits using ROMs and RAMs for control logic. Introduction to computer organization and design including selection of instruction set, register and bus organization, and implementation of control logic with micro-programmed control.

467 Microcomputers I (3)

Prereq: 341 and ET 240. (fall) Basic system organization of microcomputers including I/O interfacing. Assembly language programming for arithmetic and logic operations with emphasis upon interaction with and control of wide range of I/O devices such as switches, keyboards, printers, A/D converters, D/A converters, etc. Introduction to more powerful microprocessors. Introduction to I/O programming in BASIC language.

468 Microcomputers II (3)

Prereq: 467 and 407. (winter) Continuation of 467.

470 Communication Engineering (3)

Prereq: 232, 312, and 341. (fall) Unified approach to communications stressing principles common to all transmission systems. Review of Fourier series, Fourier integral and complex frequency techniques with emphasis on communication networks, time response and convolution, measurement of information, amplitude modulation (double and single side-band techniques), frequency modulation, sampling theory, pulse modulation and digital communications systems, fundamentals of random signal theory and its application to communication systems, noise and its effect on conventional modulation systems; noise figure, noise suppression techniques, and other related topics.

471 Statistical Analysis (3)

Prereq: 470. (winter) Analysis of engineering problems using probabilistic and statistical concepts: probability, discrete and

continuous random variables, distribution functions, means, moments, characteristic functions, statistical independence, stochastic processes, correlation, estimation, and applications to engineering problems.

472 Random Signals in Linear Systems (3)

Prereq: 471. (spring) Introduction to random electrical signals and noise. Autocorrelation, crosscorrelation, power spectra, Nth law detectors, matched filters, detection of signals in noise, optimum receivers, Bayes estimators.

478 Digital Processing of Signals (3)

Prereq: 312. (on demand) Digital techniques for various signal-processing applications. Emphasis on design and realization of digital algorithms for performing specific filtering function. Topics include sampled-data signals, discrete-time system analysis, frequency response and realization of discrete-time systems, infinite impulse response digital filter design, finite impulse digital filter design, discrete and fast Fourier transforms.

479 PCM Telemetry Systems (3)

Prereq: 471 or perm. (on demand) In-depth study of pulse code modulation systems using total system error (sampling error, quantization error, and channel error). Uniform and nonuniform quantization, companding μ - and A-law, optimum quantization, coding, DPCM (differential pulse code modulations), LDM (linear delta modulation), ADM (adaptive delta modulation). Comparison of systems and trade-off analysis.

481 Internship in Electrical Engineering (1-3)

Prereq: sr rank and perm. (fall, winter, spring, summer) Supervised work-study program, in electrical engineering profession, in established industrial environment. Credit dependent on advanced registration and mutual agreement between faculty supervisor and participating company. May be repeated; however, hrs applied for graduation limited by dept.

490 Selected Topics (1-3)

Prereq: perm. Selected topics of current interest in electrical engineering.

ENGINEERING GRAPHICS

See Industrial Technology.

ENGINEERING, INDUSTRIAL AND SYSTEMS

231 Introduction to Industrial and Systems Engineering (2)

Prereq: MATH 263A. (fall) Overview of history and functions of industrial and systems engineering. Topics discussed include historical perspective, production engineering, plant location, plant layout, work measurement and design, job evaluation, production control, quality control, engineering economy, linear programming, and project management. 2 lec.

300 Principles of Industrial Engineering (3)

Prereq: perm. (fall) Survey course covering traditional industrial engineering concepts and practices such as engineering economy, plant location, plant layout, work methods, work measurement, production control systems (including CPM and PERT), inventory control, and quality control. Not for ISE undergraduate majors. 3 lec.

304 Applied Engineering Statistics (3)

Prereq: MATH 163B or MATH 263B or perm. Introduction to efficient methods for data collection and analysis. Application of basic statistical tests, techniques and experimental design concepts to engineering and science data problem areas. 3 lec.

305 Engineering Statistics I (3)

Prereq: MATH 263C or perm. Introduction to applied probability and statistics. Evaluation of experimental data, testing hypotheses, confidence levels, and statistical prediction. 3 lec.

306 Engineering Statistics II (3)

Prereq: 305 or perm. Continuation of 305. 3 lec.

330 Engineering Economy (3)

Comparing alternatives for acquisition of capital assets, expenditure of operating monies, and income generation. Topics include equivalence, annual cost method, present worth method, rate of return method, depreciation, benefit/cost, breakeven analysis, income taxes, equipment replacement, and risk. 3 lec.

333 Work Design (5)

Prereq: 304 or 305 or perm. (fall) Design of work systems and measurement of work. Topics include job methods, operation analysis, charting techniques and schematic models, stop-watch time study, work sampling, predetermined time systems, standard data, incentive wage systems, learning curves. 3 lec, 2 lab.

336 Project Management (3)

Development and utilization of network techniques, such as PERT and CPM, to schedule activities, develop financial budgets, allocate resources, and control progress and costs of practical projects. Students introduced to use of available computer programs that generate project schedules. 3 lec.

381 Internship in Industrial and Systems Engineering (1-3)

Prereq: perm. Supervised work-study program, in industrial and systems engineering profession, in established industrial or government environment. Credit dependent upon advanced registration and mutual agreement between faculty supervisor and participating company. Course may be repeated; however, hours applied for graduation limited by dept.

407 Design and Analysis of Experiments (3)

Prereq: 304 or 306 or equiv. or perm. (spring) Design and analysis of engineering experiments approached from linear statistical model point of view. Blocking designs, full and fractional factorial designs, analysis of variance, and introduction to response surface methodology. 3 lec.

410 Decision Theory I (3)

Prereq: 304 or 305 or perm. Introduction to decision theory, utility theory, and applications. Decision making under risk. Inventory, bidding, purchasing, maintenance, and investment applications. 3 lec.

411 Decision Theory II (3)

Prereq: 304 or 305 or perm. Bayesian decision theory and applications covering both profit and nonprofit institutions. 3 lec.

415 Introduction to Systems Engineering (3)

Prereq: 305 or equiv. FORTRAN. Introduction to systems engineering concepts. Systems structure, open-loop and closed-loop systems, positive and negative feedback. Applications to production and inventory systems, population, and physical systems. Design project required. 3 lec.

417 Analytical Foundations of Industrial and Systems Engineering (3)

Prereq: 305, MATH 263C, or perm. (fall) Special analytical techniques introduced for solution of complex industrial and systems engineering problems. Calculus of finite differences, Fourier analysis, and use of transform techniques in linear system analysis discussed. Probability implications of transforms emphasized.

422 Seminar on Occupational Safety and Health (3) (2A)

Prereq: perm. Historical development of worker's compensation and industrial health and safety; review of federal activities in occupational health and safety with focus on contemporary public policy and risk/benefit issues. Specific occupational health and safety issues dealt with in seminar format.

423 Seminar on Transportation Systems (4)

Prereq: 305. Transportation systems analysis design, and related topics. Emphasis on industrial and systems engineering approaches to analysis and synthesis. Topic concentration varies from qtr to qtr.

424 Nonlinear Analytical Techniques (3)

Prereq: perm. Nonlinear phenomena and classification of singularities. Role of forcing function. Solutions found through methods of residues and variation of parameters. Applications to adaptive controlled systems and optimal controlled systems and other organized structures. 3 lec.

425 Statistical Design and Analysis of Controlled Systems (4)

Prereq: 305 or equiv or perm. Applied statistical techniques in selective design and evaluation of controlled systems. Tolerances,

errors, and variations in parameters of systems viewed in terms of probabilistic distributions and effects on output parameters. Value standards such as reliability and maintainability of equipment and human-machine systems treated.

426 Microprocessor Applications (4)

Prereq: FORTRAN, 305, or equiv. (summer, winter) Comparison and contrast of micro-, mini-, and mainframe computers; numbering and arithmetic systems; microprocessor and microcomputer hardware organizations; assembly and high-level languages; basic input/output and interfacing concepts; industrial data acquisition, process control and robotics concepts; graphics and industrial applications; data processing and file management for office use and business applications.

427 Digital Computer Systems I (3)

Prereq: COBOL or FORTRAN. (fall) Overview of digital computer systems. Programming, storage organization, and search. Number representations, conversions, and elementary arithmetic operations. Addressing and instruction sequencing. Multi-programming, multiprocessing, and real-time systems.

428 Digital Computer Systems II (3)

Prereq: COBOL or FORTRAN or perm. (winter) Continuation of 427. See 427 for description.

432 Inventory and Manufacturing Control I (3)

Prereq: 305 or with 305. (fall) Design of inventory and manufacturing control systems. Forecasting, continuous and periodic review inventory systems. Relationship between production schedules and inventory. Production scheduling systems; sequencing models; dispatching rules. 3 lec.

433 Industrial Computer Applications (5)

Prereq: 304 or 305, FORTRAN or perm. (winter) Simulation of industrial problems utilizing digital computers. Stresses user-oriented programs. Applications include use of library routines and simulation languages such as CSMP and GPSS. Projects involving design of simulation programs required.

434 Network Analysis (3)

Prereq: 305 or with 305. (fall) Engineering project planning using such techniques as PERT and critical path method, flow graphs, GERT, and other network models. 3 lec.

435 Quality Control and Reliability (3)

Prereq: 304 or 306 or perm. (winter) Application of statistics to control of quality and reliability in products and services. Design of acceptance sampling and process control systems, including attention to inspection and test methods. Design and implementation of quality assurance programs, including nonstatistical dimension of quality systems. 3 lec.

439 Information Systems Engineering (3)

Prereq: FORTRAN. Design of industrial information systems including automatic storage, retrieval, and transmission of data.

440A Industrial Plant Design I (2)

Prereq: 333, 445A or perm. (winter) Introduction to 2-qtr project in which students design manufacturing facility. 1st qtr topics include product determination, plant location, analysis of drawings, estimation of production time for each operation, and production scheduling and inventory control.

440B Industrial Plant Design II (3)

Prereq: 440A. (spring) Continuation of 440A with emphasis on selection of equipment, incentive wage system, quality control system, project management, and layout of facility using both computer and conventional techniques.

441 Introduction to Operations Research (3)

Prereq: 305 or perm. (fall) Basic methodology of operations research. Applications and mathematical structure of linear models, linear and dynamic programming, queueing theory, and other modeling techniques. 3 lec.

442 Inventory and Manufacturing Control II (3)

Prereq: 305 or perm. (winter) Branch and bound scheduling algorithms, horizon planning, control of integrated production, inventory and workforce systems, linear decision rules. 3 lec.

443 Work Design in a Technological Society (3)

Prereq: perm. Exploration of interaction between industrial and systems engineering and labor as institution. Arbitration, technological change, and work organization. 3 lec.

444 Fundamentals of Mathematical Programming (3)

Prereq: MATH 211 or perm. (winter, summer) Linear programming theory and practice. Topics include simplex method, 2-phase method, dual problem, and sensitivity analysis. 3 lec.

445A Systems Design I (3)

Prereq: perm. (fall) Design methodology and principles. Identification and definition of design project.

445B Systems Design II (3)

Prereq: 445A. (spring) Individual or small-group system design project continued from 445A.

446 Design and Analysis of Maintenance Systems (3)

Prereq: 304, 330, 333. (spring) *R. Smith*. Intended to provide industrial engineering students with working knowledge of maintenance systems and ability to design maintenance system. Will stress application of analytical and quantitative industrial engineering techniques to maintenance management. Major emphasis on design of maintenance systems. Guest lectures, field trips, and term project which requires students to design maintenance system for manufacturing company, using quantitative industrial engineering techniques, are integral parts of course.

448 Human-Machine Systems (3)

Prereq: 304 or 305 or perm. (spring) Role of operator as subsystem in human-machine systems. Design principles for information displays, equipment controls, workplace environments, and life support systems. Design project required. 3 lec.

451 Human-Machine Systems Engineering Design (3)

Prereq: sr rank or perm. Effects of physical environmental stressors on human in human-machine systems examined and appropriate counter measures designed. Stressors include heat, cold, noise, vibration, lighting, radiation. Design project required.

489 Special Investigations (1-6)

Prereq: perm.

490 Advanced Problems in Computer Applications (1-6)

Prereq: perm. Special investigations of advanced industrial and systems engineering problems involving use of digital or analog computers.

ENGINEERING, MECHANICAL

224 Dynamics (4)

Prereq: PHYS 251, grade of C or better in CE 220 or perm. Motion of particles and rigid bodies, work and energy, impulse and momentum. 4 lec.

290 Elements and Systems Laboratory (2)

Prereq: 224, PHYS 253, or concurrent with 224, PHYS 253. Introduction to measurement of various phenomena frequently encountered in practice of mechanical engineering. Strain, temperature, pressure, flow rate, acceleration, displacement, behavior of linear and nonlinear elements measured. Emphasis given to interpretation of data, as well as its measurement.

301 Kinematics of Machines (3)

Prereq: grade of C or better in 224. Analytical and graphical solutions of motion problems involving mechanical elements: linkages, gears, cams and mechanical trains, etc.

302 Dynamics of Machinery (3)

Prereq: 301. Static and inertia forces, energy storage, and balancing in machines and mechanisms. Analysis and design considerations of dynamic aspects of machines and their components.

313 Metal Processing (3)

Prereq: CE 222. Structure of metals, mechanics of metal forming and metal cutting. Analysis of forces, energy requirements, and temperature effects. Interrelationship between metal processing and mechanical properties.

321 Introduction to Thermodynamics (4)

Prereq: PHYS 253; MATH 263C. Basic engineering thermodynamics. Definitions, first law, properties and property relations, second law, availability, applications to engineering problems.

322 Introduction to Thermodynamics Lab (2)

Prereq: 290, 321; CE 340 or concurrent with CE 340. Instruments

and measurements, applications to simple thermal machines. Comparison of measurements with theory, elementary computer simulations. Report writing. Two 2-hr sessions per wk.

328 Applied Thermodynamics (4)

Prereq: grade of C or better in 321. Nonreactive and reactive mixtures, turbomachinery, analytical studies of gas and vapor power cycles, and refrigeration. 4 lec.

381 Internship in Mechanical Engineering (1-3)

Prereq: jr rank and perm. Supervised work-study program, in mechanical engineering profession, in established industrial environment. Credit dependent on advanced registration and mutual agreement between faculty supervisor and participating company. Course may be repeated; however, hrs applied for graduation limited to max of 6. Also listed as 481.

400 Heating, Ventilation, and Air Conditioning (3)

Prereq: jr rank. Description and evaluation of heating; air conditioning, and total-energy systems employed to provide thermal environments for buildings ranging in scope from residences to integrated commercial, apartment, or industrial complexes. Covers human comfort, psychrometrics, load analysis, techniques, equipment, and controls.

401 System Analysis and Control (4)

Prereq: MATH 340. Modeling and formulations of physical systems. Transient and steady-state dynamic responses, and other fundamental theory of automatic controls and applications. 3 lec, 1 lab.

403 Machine Design I (4)

Prereq: CHE 331, grade of C or better in CE 222. Applications of mechanics, mechanisms, materials, and mechanical processes to design and selection of machine members and units of power transmission.

404 Machine Design II (4)

Prereq: 403. Morphology of engineering design. Applications of statistics and probability and techniques of optimization to design. Team design project.

406 Advanced Kinematics (4)

Prereq: 301. Analysis and synthesis of planar and 3-dimensional mechanisms using classical and modern analytical approaches. Structural synthesis of mechanisms, dimensional synthesis of linkages for function generation, path generation, and for rigid-body guidance. Applications of matrix methods, optimization techniques, and computer solutions.

407 Fundamentals of Nuclear Engineering (3)

Prereq: perm. Nuclear engineering, including nuclear reactions, radiation detection and measurement, reactor criticality, principles of reactor control, radiation shielding, effects of radiation on materials, uses of radioactive materials.

408 Nonlinear Vibrations (3)

Prereq: perm. Qualitative and numerical study of mathematics and physics of nonlinear systems. Formulations of nonlinear engineering problems, solutions techniques, and stability analysis.

409 Advanced Engineering Dynamics (3)

Prereq: 224. Theoretical analysis and applications of dynamical aspects and problems of machines and systems.

412 Heat Transfer (4)

Prereq: MATH 340, ET 240, grade of C or better in ME 321 and CE 340. Basic concepts of conduction in 1 or more dimensions, steady and transient modes. Radiation, fundamentals of convection in various modes, heat exchanger design. 4 lec.

413 Conduction and Radiation Heat Transfer (4)

Prereq: perm. Advanced analytical treatment of conduction and radiation heat transfer. Boundary value problems, orthogonal expansions, moving heat sources, multi-dimensional problems with time varying boundary conditions, finite difference analysis, conformal transformations, radiation network matrix analysis, diffuse-specular exchange. Monte Carlo techniques, etc.

417 Design of Thermal Systems (4)

Prereq: 328, 412. Design of systems in which thermodynamics, transport behavior, and optimization techniques are major considerations. Emphasis on total design approach including factors such as cost and reliability. Typical systems include power, propulsion, environmental, cryogenic. Design project and report required.

418 Mechanical Engineering Experimentation (1)

Prereq: ME sr or grad rank. Instruction in experimental procedure and experience in designing and executing lab experiments. Students plan and execute their own experiments to acquire answers to assigned problems. Variety of areas covered including control systems, energy conversion, fluid flow, heat transfer, motion measurements, stress-strain. Instructional guidance provided by entire mechanical engineering staff. Provides familiarity with variety of instrumentation and procedures. 3-qr sequence with experimental subjects phased with prerequisites.

419 Mechanical Engineering Experimentation (1)

Prereq: ME sr or grad rank. Continuation of 418. See 418 for description.

420 Mechanical Engineering Experimentation (1)

Prereq: ME sr or grad rank. Continuation of 419. See 418 for description.

424 Gas Dynamics I (3)

Prereq: CE 340 or perm. 1- and 2-dimensional compressible flow-isentropic flow, flow with heat transfer, friction, shocks, generalized 1-dimensional flow. Applications to propulsion systems. 3lec.

425 Vehicle Propulsion Systems (4)

Prereq: 424. Applications of basic engineering disciplines to design and analysis of vehicle propulsion systems. Extensive use of digital computers. Term report required.

427 Power Station Engineering (3)

Prereq: 328 and 412. Fuels, principles of combustion, stationary boilers, grates, stokers, furnaces, coal pulverizers, economizers, preheaters, superheaters, stacks, forced and induced draft, boiler-feed pumps, heat balances, and hydro power. 3lec.

430 Applied Thermodynamics Lab (3)

Prereq: 322, 328, and 412. Sr lab course involving more complex experiments on steam turbines, boilers, combustion, pumps, air compressors, heat transfer, and refrigeration. Three 2-hr sessions per wk.

440 Direct Energy Conversion (4)

Prereq: perm. (on demand) General principles of unconventional energy conversion. Thermoelectricity, thermionics, MHD, fuel cells, photo voltaics, wind systems, solar systems, and energy storage.

450 Computer-Aided Design (4)

Prereq: 403, 412, 491, or perm. Applications of contemporary computer-modeling techniques to solve complex problems in stress, heat transfer, dynamic systems, and fluid flow. Emphasis given to applications of these techniques to solve specific problems in mechanical-engineering design.

455 Robotics (3)

Prereq: 224, EE 314, ET 240, or perm. Principles of design of computer-based, intelligent machines. Robot characteristics, microprocessor/microcomputer fundamentals, input-output sensors and actuators, computer achievement of machine kinematics, robot-control techniques, lab experience in microprocessor-machine interfacing.

475 Solar Design (3)

Prereq: jr/sr rank, MATH 263C, PHYS 253, or equiv. Introduction to theoretical principles and practical design aspects of solar energy systems. Topics covered include principles of radiation; heating load computation; air and liquid, flat-plate collectors; concentrating collectors; energy storage; photovoltaic conversion; economic analysis.

480 Colloquium (1)

Prereq: sr rank. Open presentation of individual engineering analysis or design effort. Requires demonstration of individual analytical or design ability and satisfactory oral presentation techniques.

481 Internship in Mechanical Engineering (1-3)

Same as 381. See 381 for description.

484 Projects in Thermal Machinery (3)

Prereq: perm, good academic record. Research in thermal machines. Individual work on experimental or analytical project involving current problems. Training in use of library, theory and use of instruments, error analysis, planning of experiments, effective report writing. Students should elect 2-term sequence to allow adequate time for completion of meaningful project. Report required.

485 Projects in Thermal Machinery (3)

Prereq: perm, good academic record. Continuation of 484. See 484 for description.

486 Projects in Thermal Machinery (3)

Prereq: perm, good academic record. Continuation of 484-485. See 484 for description.

489 Special Investigations (1-6)

Prereq: perm.

491 Mechanical Vibrations I (3)

Prereq: grade of C or better in 224, MATH 340, ET 240, srs, grad. Characteristic phenomena of mechanical vibrations encountered in machines and structures (of 1-degree of freedom) and their quantitative investigation. Simple harmonic motion; free, transient, and forced vibrations; damping effects.

492 Mechanical Vibrations II (4)

Prereq: grade of C or better in 491, perm. Application of matrix methods; 2-degree of freedom systems; lumped mass systems with several degrees of freedom, and methods for normal mode determination, 4lec.

493 Lubrication and Bearing Analysis (3)

Prereq: perm. Concepts of boundary, hydrostatic, and hydrodynamic lubrication. McKee, and Boyd and Raimondi methods. Solid lubrication, porous bearings, gas bearings.

494 Advanced Machine Design (3)

Prereq: perm. Advanced considerations in design and analysis of machine members, strength under combined stress, thermal stress, fatigue in metals, design using plastics. 3lec.

495 Introduction to Kinetic Theory and Statistical Thermodynamics (4)

Prereq: perm. (arranged) Kinetic theory, classical and quantum statistical mechanics with applications to engineering devices. 3lec.

496 Experimental Methods in Design (3)

Prereq: 403, perm. Investigation and evaluation of experimental methods that may be used to obtain design and performance data. Techniques of photoelasticity, strain measurements, and vibration measurement.

497 Methods of Engineering Analysis I (4)

Prereq: MATH 340 or perm. Applications of matrices, Fourier series, partial differential equations, and Bessel functions.

ENGINEERING AND TECHNOLOGY

100 Engineering and Technology (3) (2A)

Introductory course to engineering and technology for students, in the Summer Pre-Engineering Program. Lectures in related fields and involvement in engineering problems through student-selected projects.

106 Engineering Orientation (1)

Orientation course exploring various disciplines in engineering profession, including chemical, civil, electrical, industrial and systems, and mechanical engineering. Primarily intended for students who have not decided upon majors or who desire information about various areas of engineering.

134 Electronic Maintenance (3)

Information on how to maintain and repair all types of electronic equipment (e.g., hi-fi amplifiers, AM & FM receivers, digital logic circuits, etc.). No previous experience in electronics necessary. Demonstrations and lab experience will provide each student with theory and practical basic instructions on how to use test equipment. 1 hr lec, 4 hrs lab.

180 Problem Solving (3) (1M)

Introduction to approach to problem solving by presenting, at fr level, many problems common to all branches of engineering such as balance of forces, materials, energy, and transport relationships. Real-world problems and situations described in mathematical terms, and alternative methods of problem solutions presented, showing need for more advanced techniques and

knowledge that student will acquire in later mathematics, engineering, and science courses.

181 Computer Methods in Engineering I (3)

Prereq: 180 or Math 263A or perm, preference given to ET or pre-engineering majors. Introduction to application of digital computation for solution of engineering problems, with emphasis on methodology and organization. Problem formulation and programming using structured language in a terminal-based interactive environment. Emphasis on logical program development and strategy, data input/output and processing, arrays, procedures, and functions and their role in solving engineering problems through modular program design. No credit given to students with credit for CS 230.

240 Introduction to Computer Solutions of Engineering Problems (4)

Prereq: MATH 263C or with MATH 263C or perm. Introduction to application of digital computation techniques to engineering problems. Study and use of FORTRAN language as analytical tool. Utilization of common computer peripheral equipment.

320 History of Western Technology (3) (2A)

Survey of significant technological innovations of western civilization from Greco-Roman period into 20th century. Interrelationships, in history, between technology and society. Background in technology or science not required.

322 Introduction to Materials Behavior (3)

Introductory materials science course covering behavior of metals, polymers, and ceramics for nontechnical majors.

325 Pollution Solutions I (3) (2A)

Understanding current air pollution problems, their causes, effects, and possible solutions and impact of those solutions on society.

326 Pollution Solutions II (3) (2A)

Same course description as 325 covering different aspects and topics. Not a continuation of 325.

331 Fluid Dynamics for Nonengineers (3) (2A)

Prereq: jr rank or perm. Not open to engineering students. Physical, not mathematical, introduction to principles controlling fluid motions in our environment. Study of weather, blood circulation, aerodynamics, river hydraulics, and rocketry through design of golf balls and plumbing systems included. Introduction to mechanics, fluid properties, fluids at rest and in motion. Lectures and reading assignments supplemented with films.

334 Water Pollution Control (3) (2A)

Prereq: soph rank, non-engineering students. Designed for student with limited technical background but who is interested in problems of water pollution. Deals with nature of water, source and character of pollutants, technology of waste-water renovation, ecology of water pollution and legal, economic, and administrative constraints.

337 Transportation Today (3) (2A)

Prereq: jr rank or perm, not open to civil engineering majors. Designed for student with limited technical background who is interested in gaining knowledge in area of highway and transportation planning and design. Major topics include geometric factors, traffic studies, modes of transportation, human equation, and planning strategies.

345 Fundamentals of Analog Computation (3)

Prereq: MATH 340. Basic operation of analog computer and auxiliary equipment. Solution of linear and nonlinear differential equations and simulation of physical systems on analog computer.

350 Engineering and the Technological Society (3) (2A)

Prereq: jr or sr rank. Technical inventions and social inventions, impact and social consequences of engineering, public policy issues, ethical considerations, and some exploration of alternative futures. Discussion and lecture format used.

360 Communication Technology (3) (2A)

Introduction to theory and application of electronic devices and systems employed in communications. Topics include among others man-to-computer communication, CRT terminals, radio and television receivers and transmitters, communication satellites, information transmission by light waves. Not open for credit to engineering majors.

445 Advanced Numerical Methods (4)

Prereq: ME 497 or equiv. (winter) Numerical methods for solution of ordinary and partial differential equations, stability considerations and error estimates, application to variety of engineering problems, numerical method of lines and integration procedures for stiff ODE systems.

470 Energy and the Environment (3) (2A)

(on demand) Technical, economic, political, and environmental factors in energy production. Conventional, gasification, syn-fuels, fission, fusion, solar, wind, and possible future conversion techniques. Course designed to provide understanding needed for intelligent participation in societal decisions related to energy issues.

ENGLISH

The major requirement for the A.B. degree consists of at least the following 42 hours above 199: (A) 200, (B) 312, 313, and 314, (C) 301 or 302 or 303, (D) 307 or 351 or 352, (E) 321 or 322, (F) 360 or 361 or 362, and (G) 460. Completion of these courses automatically completes the College of Arts and Sciences requirement of nine hours in the major at the junior-senior level.

An intensive, two-year major program by tutorial instruction is offered by the English Department, beginning each fall term. Information is available from the chairman.

Students who wish to major in creative writing will take 20 hours of creative writing, 15 of which will be in addition to the requirements for an English major, and five of which will be 453 instead of 460. At the discretion of the director, a student may substitute five hours of 308J, Advanced Composition, for five hours of creative writing.

Honors work in English: see "Departmental Honors" under *Honors Tutorial College*. For general English requirements, see the *College of Arts and Sciences* section of this catalog.

English minor: A minor in English consists of a minimum of 24 hours in a cluster designed by the student and receiving the approval of the department's Undergraduate Committee on an individual basis. This must include at least two courses at or above the 300 level. In accordance with an Arts and Sciences policy no courses elected to fulfill the composition requirement may count as part of the minor.

English Language and Literature

150 Fundamental Usage Skills (4)

Prereq: placement or recommendation (but note that credit for 150 will not be given any student who has passed any higher-level English course). Only students with severe writing disabilities should enroll in 150; students who are merely weak or anxious about their preparation should enroll in 151 and seek concurrent tutoring from the Academic Advancement Center. Does not satisfy Arts and Sciences humanities requirement. (Nonnative speakers should take 150F.)

151 Freshman Composition: Writing and Rhetoric (5) (1E)

Prereq: fr and soph only. Focuses on writing expository essays which are well-organized and logically coherent. Students write approximately 10 essays (5,500 words). Essay topics come from personal experience or from reading nonfiction. Not a grammar course; those who require services of tutor in correcting sentence errors should consult Academic Advancement Center. (Nonnative speakers should take 151F.)

152 Freshman Composition: Writing and Reading (5) (1E)

Prereq: fr and soph only. Focuses on writing expository essays which are well-organized and logically coherent. As preparation for 4-5 papers required, students will read fiction, poetry, and drama focused on common themes and discuss their understanding of issues and works presented.

153 Freshman Composition: Special Topics (5) (1E)

Prereq: fr and soph only. Similar in structure and purpose to 152 but each section—topic and texts—designed by person who

teaches it. Specific course description with text lists advertised qtrly in Ellis Hall.

**153A Freshman Composition: Special Topic:
Women and Men in Literature (5) (1E)**

Prereq: fr and soph only. Readings used to examine depiction of women and men in literature. Students encouraged to think and write about how, in both literature and life, women and men see themselves and each other, how people learn what society expects of them, and about such topics as sexuality, marriage, friendship, and rebellion against sex roles.

**153B Freshman Composition: Special Topic
Afro-American Experiences in Literature (5) (1E)**

Prereq: fr and soph only. Readings examine various experiences of black person in America, from earliest writings up to — and emphasizing — most contemporary literature. Including fiction, poems, essays and autobiography, course deals with oppression, violence, and tragedy as well as humor, joy, and love.

200 Introduction to Literature (4) (2H)

Prereq: one course above 150. Approaches to reading and interpretation of literature, emphasizing skills, techniques, and language of interpretation.

201 Interpretation of Fiction (5) (2H)

Prereq: one course above 150. Forms and techniques of art of fiction.

202 Interpretation of Poetry (5) (2H)

Prereq: one course above 150. Intensive reading of selected poems from all periods of English and American literature and study of forms and techniques.

203 Interpretation of Drama (5) (2H)

Prereq: one course above 150. Analysis of number of plays written at various times and in various dramatic forms.

**204 Introduction to International Literature I:
The Classical Tradition (5) (2H)**

Prereq: 5 hrs above 199. Selected classical texts, sometimes alone and sometimes in conjunction with modern texts, for purpose of defining classical sensibility in western literature.

**205 Introduction to International Literature II:
Romantic Tradition (5) (2H)**

Prereq: 5 hrs above 199. Will deal with esthetic and philosophical concepts that have formed Romantic Tradition in western literature. Concentration on works by German, English, and French writers.

**206 Introduction to International Literature III:
The Modern Tradition (5) (2H)**

Prereq: 5 hrs above 199. Selected literary works which provide background for and express modern sensibility in western literature.

210 Critical Approaches to Popular Literature (4) (2H)

Prereq: one course above 150. Introduction to techniques of literature and literary criticism using books from that area where serious literature and popular literature meet.

**270 Special Studies: Individual or
Comparative Authors (2-3) (2H)**

Prereq: one course above 150. Intensive study of individual or comparative authors: (A) Medieval, (B) Renaissance, (C) Restoration and 18th century, (D) 19th-century American, (E) 19th-century British, (F) 20th-century American, (G) 20th-century British, (H) Continental.

**271 Special Studies: Selected Themes or
Topics in Literature (2-3) (2H)**

Prereq: one course above 150. Intensive study of selected theme or topic: (A) poetry, (B) fiction, (C) drama, (D) comparative genres, (E) language, (F) stylistics and rhetoric, (G) literature and film, (H) criticism.

280 Expository Writing and the Research Paper (4)

Prereq: one course above 150. Intermediate-level writing course offering practice in library research, techniques of documentation, and writing research paper.

301 Shakespeare, The Histories (5) (2H)

Prereq: 5 hrs above 199. History plays.

301A Shakespeare, Selected Plays and Poems (3) (2H)

Prereq: 5 hrs above 199. Selected tragedies, histories, and come-

dies with related poems. Examination of themes, characters, and language. For nonmajors. Not duplicated by 301.

302 Shakespeare, The Comedies (5) (2H)

Prereq: 5 hrs above 199. Comedies.

302A Shakespeare: Selected Plays and Poems (3) (2H)

Prereq: 5 hrs above 199. Continuation of 301A. See 301A for description. Not duplicated by 302.

303 Shakespeare, The Tragedies (5) (2H)

Prereq: 5 hrs above 199. Principal tragedies.

303A Shakespeare: Selected Plays and Poems (3) (2H)

Prereq: 5 hrs above 199. Continuation of 301A and 302A. See 301A for description. Not duplicated by 303.

304 English Bible (5) (2H)

Prereq: one course above 150. Selected prose and poetry of Old and New Testaments.

305J Technical Writing (4) (1J)

Prereq: jr rank. Focuses on writing of clear and concise proposals, feasibility reports, progress reports, and descriptions of mechanisms and technical processes.

306A Studies in Oriental Literature (5) (2T)

(fall) Introduction to cultural background of Oriental literature.

306B Studies in Oriental Literature (5) (2T)

Prereq: 306A. (winter) Continuation of 306A. Study of classical Oriental literature.

306C Studies in Oriental Literature (5) (2T)

Prereq: 306B. (spring) Continuation of 306A-B. Study of modern Oriental literature.

307 The Structure of American English (5)

Prereq: 10 hrs above 199. Study of grammar of English using linguistic model chosen from contemporary linguistic theories. Course inevitably has dual focus: on facts of English usage and on theories linguists have created to organize and explain them. Instructor may wish to present complete grammar (phonology, morphology, syntax) or portion of one (*e.g.*, syntax), or compare several grammars. Phonetics may be taught.

308J Advanced Composition (4) (1J)

Prereq: jr rank. Aim: to increase skills and expertise in writing of discursive prose. Method: regular practice and evaluation, supplemented by attention to professional prose and concepts in rhetoric and style.

309A Creative Writing: Poetry (5)

Beginning course in creative writing. Will concentrate on processes of invention as they lead to works of poetry. Student manuscripts criticized; creative literary works of recognized importance analyzed; act of writing continuing practice.

309B Creative Writing: Fiction (5)

Beginning course in creative writing. Will concentrate on processes of invention as they lead to works of fiction. Student manuscripts criticized; creative literary works of recognized importance analyzed; act of writing continuing practice.

310 McGuffey Lectureship in Literature (1-5)

Prereq: one course above 150. Special series of lectures offered by current McGuffey Visiting Professor of English. Subject announced each qtr. Number of lectures offered determines credit hrs assigned.

**312 Medieval and Renaissance English
Literature (5) (2H)**

Prereq: 10 hrs above 199. Major works, writers, genres, and social norms of Medieval and Renaissance periods.

**313 Restoration and Neoclassical
English Literature (5) (2H)**

Prereq: 10 hrs above 199. Major works, writers, and genres of Restoration and Neoclassical periods.

314 Romantic and Victorian Literature (5) (2H)

Prereq: 10 hrs above 199. Major works, writers, and genres of 19th century.

315 American Literature (3) (2H)

Prereq: one course above 150. American authors, themes, genres, etc., usually in 19th- and 20th-century literature.

- 316 English and Continental Literature (3) (2H)**
Prereq: one course above 150. Authors, themes, genres, etc. in English and European literature.
- 317A American Literature by Black Authors (5) (2H)**
Prereq: one course above 150. Examines literature being written by black authors in America and attempts to assess quality and significance of this cultural contribution. (A) Emphasizes background materials, fiction, and autobiography of 19th and 20th centuries; (B) emphasizes poetry, but includes further reading in recent fiction and nonfiction prose; (C) emphasizes drama, continues study of new trends in poetry.
- 317B American Literature by Black Authors (5) (2H)**
Prereq: one course above 150. Continuation of 317A. See 317A for description.
- 317C American Literature by Black Authors (5) (2H)**
Prereq: one course above 150. Continuation of 317A, B. See 317A for description.
- 318 Women and Literature (4) (2H)**
Prereq: jr rank or perm. Survey of work of significant women writers of past and present.
- 321 American Literature to the Civil War (5) (2H)**
Prereq: 10 hrs above 199. Major works, writers, and genres of American literature before Civil War.
- 322 American Literature Since the Civil War (5) (2H)**
Prereq: 10 hrs above 199. Major works, writers, and genres of American literature since Civil War.
- 331 20th Century British and American Literature (5) (2H)**
Prereq: 10 hrs above 199. Some major works, writers, and genres of British and American literature in this century.
- 335 The Ohio University Writers (4)**
Features personal visits to classroom by writers teaching at Ohio University to discuss their works with students, to answer questions from class, and to read from new work or work in progress.
- 345 Readings in Children's Literature (4) (2H)**
Prereq: 5 hrs above 199. Readings in classic and contemporary children's literature, together with consideration of historical development of children's literature, philosophical and esthetic bases, criteria of great children's literature.
- 350 Traditional Grammar, Mechanics, and Usage (3)**
Prereq: one course above 150. Concentrates upon grammatical understanding and awareness of relationships in sentence structure, including understanding of incidental usage and punctuation.
- 351 The History of the English Language (5)**
Prereq: 10 hrs above 199. English, like every language, has been and is at present in state of evolution. Course examines various kinds of changes to which it is subject: in sound patterns and in grammatical forms, in vocabulary and its semantic values. Shows origin and fate of various literary and social norms of various periods of language, and gives some attention to dialects.
- 352 The Development of American English (5)**
Prereq: 10 hrs above 199. History of English language in America; topics covered are comparison of British and American English, phonetic transcription, sources of American English in 17th-century British dialects, development of major regional dialects on east coast and their movement westward, archaic speech of Appalachia and other relic areas, black English, Noah Webster's spelling book and dictionaries, background of controversy over correctness in America.
- 360 Major English Authors (4) (2H)**
Prereq: jr or sr rank or perm. Studies 1 or 2 British authors with view to providing extensive knowledge of writer's or writers' esthetic tactics, themes, and career developments. Writers to be studied named in subtitle.
- 361 Major American Authors (4) (2H)**
Prereq: jr or sr rank or perm. Studies 1 or 2 American authors with view to providing extensive knowledge of writer's or writers' esthetic tactics, themes, and career developments. Writers to be studied named in subtitle.
- 362 Major International Authors (4) (2H)**
Prereq: jr or sr rank or perm. Studies 1 non-English speaking writer, or 2 writers, 1 or both of whose native language is not English. Seeks to provide extensive knowledge of writer's or writers' esthetic tactics, themes and career developments. Writers to be studied named in subtitle.
- 385 History of Books and Printing (4)**
Prereq: one course above 150. (fall) Introduction to history of the book and its place in development of western culture from ancient world to present. Approach is primarily historical, cultural, and esthetic rather than technical.
- 393 Creative Writing Workshop: Short Story (5)**
Prereq: 309B and perm. Instruction and practice in writing of fiction, concentrating on development of narrative techniques, character building in stories, staging scenes in narrative, etc.
- 394 Creative Writing Workshop: Nonfiction (5)**
Prereq: 309B and perm. Will concentrate on writing nonfiction, and will explore general techniques of prose as they apply to fictionalized biography and literary essay and as used to dramatize effectively works that are generally considered nonfiction.
- 395 Creative Writing Workshop: Poetry (5)**
Prereq: 309A and perm. Experience and language of poetry, and emphasis upon practice of writing poetry.
- 450A Teaching Language and Composition (3)**
Prereq: sr rank. Content and methods of presentation for teaching language and composition in high school. Not applicable to Arts and Sciences 200-level requirement.
- 450B Teaching Literature (3)**
Prereq: sr rank. Content and methods of presentation for teaching literature in high school. Not applicable to Arts and Sciences 200-level requirement.
- 451 Studies in Criticism (5)**
Prereq: sr rank. Some aspects of history and of problems in critical theory and its application.
- 453 Form and Theory of Literary Genres (5)**
Prereq: 10 hrs of creative writing. Intensive study of serious fiction or poetry or drama (in alternate offerings as needed) with emphasis on problems writer faces in literary composition.
- 455 English Education Workshop (1-5)**
Prereq: teaching certificate or equiv or perm of instructor. Studies in principles, problems, approaches, and issues in teaching of English from elementary school to post-secondary. Topics determined according to need and demand.
- 457 Readings in English Education (5)**
Prereq: jr rank. Recent developments and writings in English education and their possible application to teaching of jr and sr high school English.
- 460 Literary Genres (4)**
Prereq: jr or sr rank or perm. Intensive study of selected literary genre in selected period. Genre and period indicated in subtitle.
- 461 Colloquium (5)**
Prereq: sr rank. (fall) Specific interdisciplinary problems to be assigned each qtr.
- 462 Colloquium (5)**
Prereq: sr rank. (winter)
- 463 Colloquium (5)**
Prereq: sr rank. (spring)
- 470 Special Studies (5)**
Prereq: sr rank. Selected literary topics and studies.
- 490 Independent Reading (1-15)**
Prereq: perm. Directed individual reading and research.
- 496 Advanced Workshop in Creative Writing (4)**
Prereq: 10 hrs of creative writing and perm. Will consist largely of independent work in particular literary genre. Students meet together or individually with instructor, according to needs of particular work of that qtr.
- 499H Honors Project (5-15)**
Prereq: perm. Completion of individual writing project for A.B. with honors in English.

Humanities

107 Humanities — Great Books (3) (2H)
Prereq: fr and soph only. (fall) Ancient classics of western civilization (Greek, Roman, Biblical) leading toward understanding of cultural heritage. Guidance in critical thinking, reading, and writing about those works.

108 Humanities — Great Books (3) (2H)
Prereq: fr and soph only. (winter) Medieval and Renaissance classics of western civilization. See 107 for further description.

109 Humanities — Great Books (3) (2H)
Prereq: fr and soph only. (spring) Modern classics of western civilization (18th-20th centuries). See 107 for further description.

117 Humanities — Great Books of the Orient (3) (2H)
Prereq: fr and soph only. Masterpieces (both ancient and modern) of India, China, and Japan, leading toward understanding of oriental culture.

307 Humanities — Great Books (3) (2H)
Prereq: jr and sr only. (fall) Ancient classics of western civilization (Greek, Roman, Biblical) leading toward understanding of cultural heritage. Guidance in critical thinking, reading, and writing about those works.

308 Humanities — Great Books (3) (2H)
Prereq: jr and sr only. (winter) Medieval and Renaissance classics of western civilization. See 307 for further description.

309 Humanities — Great Books (3) (2H)
Prereq: jr and sr only. (spring) Modern classics of western civilization (18th-20th centuries). See 307 for further description.

FILM

201 Introduction to Film I (4)
Prereq: soph rank. (fall) Examination of esthetics of American narrative film. Includes films by Ford, Hitchcock, and Hawks. Wkly screenings.

202 Introduction to Film II (4) (2H)
(winter) Introductory survey of international film history including Russian, German, French, and American. Wkly screenings.

203 Introduction to Film III (4) (2H)
(spring) Selected topics such as heroes and heroines: men and women in Hollywood movies. Wkly screenings.

340 Film Techniques (3) (2H)
Prereq: 201 or perm. Basic 8mm production techniques; organized as beginning filmmaking workshop.

341 Advanced Super-8 (4) (2H)
Prereq: 340 or perm. Workshop in Super-8mm production for students working on independent film projects. Students should have their own cameras.

343 Scriptwriting (4)
Prereq: 201 or perm. Preparation and presentation of materials written for film production, including narrative and nonnarrative formats. Operates as workshop supplemented by wkly tutorials.

344J The Practice of Film Criticism (4)
Prereq: 201, 202, or perm. Survey of film criticism. Techniques and styles of established film critics examined. Students assigned exercises in critical writing. Meets jr-level English requirement.

361 Motion Picture Production I (5)
Prereq: 340 or perm. (fall) Professional workshop in 16mm techniques; elementary film structuring; camera and lighting; editing; sound recording; lab preparation. Intensive exercise as individual filmmaker. Limited enrollment; admission by perm only.

362 Motion Picture Production II (5)
Prereq: 361. (winter) Continuation of 361. Admission by perm only.

363 Motion Picture Production III (5)
Prereq: 361. (spring) Continuation of 362. Admission by perm only.

369 Survey of Film Animation (4)
(summer) General survey of film animation; history and technique. Wkly screenings.

430 Film History I (4)
Prereq: 201, 202, or perm. Survey of development of film as art form from its origins to present. All major figures and movements covered, including Griffith, Chaplin, Eisentein, German Expression, etc. Wkly screenings.

431 Film History II (4)
Prereq: 201, 202, or perm. Continuation of 430.

432 Film History III (4)
Prereq: 201, 202, or perm. Continuation of 430.

451 Film Theory and Criticism I (4)
Prereq: 201 or perm. (fall) Development of film theory from classical realist/formalist debates to current feminist methods.

452 Film Theory and Criticism II (4)
Prereq: 451 or perm. (winter) Continuation of 451.

453 Film Theory and Criticism III (4)
Prereq: 452 or perm. (spring) Continuation of 452.

471 Film Topics Seminar (1-5)
Prereq: perm. (fall) Investigation of selected motion picture topic announced in advance of registration. Orientation may be either scholarly-critical or production workshop. Topics and credit hours vary qtr to qtr.

472 Film Topics Seminar (1-5)
Prereq: perm. (winter) See 471 for description.

473 Film Topics Seminar (1-5)
Prereq: perm. (spring) See 471 for description.

480 Individual Production Problems (1-5)
Prereq: perm. Production of motion picture. May be repeated.

481 Individual Readings (1-5)
Prereq: perm. Readings and reports on works related to motion pictures. Reading list selected by student in consultation with faculty member. May be repeated.

482 Independent Study (1-15)
Prereq: perm. Advanced individual creative or scholarly work in film. May be repeated. Max 45 hrs.

FINANCE

The finance major prepares professionals who are concerned with the development and utilization of funds for economic and social purposes.

Coursework is available in the fields of financial management, commercial banking, financial institutions, security markets, and risk and insurance.

In addition to the B.B.A. degree requirements, a student majoring in finance must complete 24 hours of finance courses at the 300 or 400 level including 327.

102 Personal Money Management (4)
Prereq: not open to jrs and srs. How to live better financially. Relation of personal goals to money management in terms of expenditures, savings, and tax considerations. Financial media that serve the individual such as life insurance, savings, securities, and consumer and mortgage credit.

325 Managerial Finance (4)
Prereq: ACCT 202, QBA 201, jr rank. (fall, winter, spring, summer) Role of financial management in business enterprise; financial analysis; planning needs for short-term and long-term funds; planning for profits; capital budgeting; internal management of working capital and income; raising funds to finance growth of business enterprises.

327 Banking and the Financial System (4)
Prereq: 325 and jr rank and perm. Functioning of commercial banking system and other financial institutions. Flow of funds and interest-price movements in money and capital markets. Supply of loanable funds and demand for funds in mortgage loan

market, consumer credit market, corporate securities markets, and markets for government securities and municipal obligations. Consideration of effects on financial markets of Federal Reserve and Treasury policies.

331 Risk and Insurance (4)

Prereq: jr rank and perm. Social importance of risk and its place in personal, business, and national life, including principles and methods of handling risk. Special interest in technique of insurance.

341 Investments (4)

Prereq: 325, jr rank, and perm. Principles in determination of investment media for individual and institutional portfolios. Sources of investment information; analysis of financial statements; investment risks and yields. Securities markets and their behavior.

428 Management of Financial Institutions (4)

Prereq: 327 or perm. Analysis of objectives, functions, practices, and problems of financial institutions as viewed by management of these institutions.

432 Property and Casualty Insurance (4)

Prereq: 331 and perm. Analysis of principal types of property and casualty insurance policies with respect to protection afforded policyholder, his or her obligations, and cost of protection. Policies studied include fire and extended coverage, allied lines, business interruption, inland marine, automobile, general liability, theft, and bonds. Subjects of risk, insurance law, and multiple-peril policies also covered.

436 Life Insurance (4)

Prereq: 331 and perm. Fundamental economics of life insurance. Principles and practices of life insurance including types of contracts, group and industrial insurance, and annuities.

442 Security Analysis (4)

Prereq: 341 and perm. Problems of selecting securities for various investment purposes. Industry structure, volume-price-cost relationships, management, financial position, terms of securities contracts, and market price behavior studied to determine attractiveness of securities. Portfolio construction considered.

445 Portfolio Management (4)

Prereq: 341 and perm. Decision-making processes in management of individual and institutional securities portfolios. Theoretical foundations of portfolio selection and construction. Model-building and other criteria applicable to selection, risk-return tradeoffs, revision and evaluation of portfolio performance. Applications of computer technology and other quantitative techniques to different aspects of portfolio management.

450 Credit and Lending Principles of Financial Institutions (4)

Prereq: 325. Provides examination of basic functions involved in supplying credit to borrowers by financial institutions. Organizational framework and division aspects of process studied. Significant policy issues and implications covered.

453 Real Estate Finance (4)

Prereq: 325 and perm. Financial and investment analysis in purchase and sale of real properties, including single-family dwellings and income properties. Income and risk analysis in real estate investment. Instruments of real estate finance and institutional arrangements in mortgage markets. Government and mortgage markets. Flow of funds and credit conditions in mortgage markets.

455 International Finance (4)

Prereq: 325 or perm. Problems in international finance. Financing international trade and other transactions; foreign exchange market and exchange market and exchange rates; international payments system. Foreign central banking and current developments in international financial cooperation.

461 Problems in Business Finance (4)

Prereq: 325 and perm. Case study of financial management in business enterprises. Planning current and long-run financial needs, profit planning, allocation of funds, raising funds, dividend policies, expansion and combination, recapitalization and reorganization.

463 Capital Allocation (4)

Prereq: 325 and perm. Planning capital outlays. Methods for ranking investment proposals. Theories of financial structure

and cost of capital. Approaches to investment decisions under conditions of uncertainty.

465 Mathematical Analysis of Financial Decisions (4)

Prereq: 325 and perm. Application of quantitative methods to financial management, with special emphasis on systems approach to evaluating proposed financial decisions.

491 Seminar (3, 4, or 5)

Prereq: perm. Selected topics of current interest in finance area.

497 Independent Research (1-4)

Prereq: perm. Research in selected fields of finance under direction of faculty member.

498 Internship (1-4)

Prereq: perm.

FOREIGN LANGUAGES AND LITERATURES

Department of Linguistics

African, Asian, and Middle Eastern Languages are administered by the Department of Linguistics. A major in African and Asian languages is not offered. An undergraduate seeking a certificate in African or Asian studies may choose three quarters of an appropriate African or Asian language as part of the course requirements.

Department of Modern Languages

Germanic, Romance, and Slavic Languages are included in the offerings of the Department of Modern Languages. Majors are offered in French (major code #5221), German (major code #5222), and Spanish (major code #5225).

The major requirement for the A.B. degree in French or German is a minimum of 36 quarter hours beyond 213. In Spanish the requirement is 40 quarter hours beyond 213. Specific course requirements for French and German are 341, 342, 343, 348 or 349, 355, 356, and at least three courses at the 400 level which should include courses in both language and literature. Spanish majors must, in addition to these, complete course 354.

Language majors who participate in study-abroad programs are to take at least two 400-level courses in their major on the Athens campus. Spanish majors must take one of the following courses: 443, 444, 447, or 448 as part of the 400-level requirement. A modern languages major is not permitted to take courses in the major subject on the pass/fail basis. Should a student receive a D in a course required for the major, he or she must repeat the course until at least a C is made. Majors are strongly urged to study abroad in one of the department's centers. Suggested electives for majors are classical languages, comparative literature, cultural anthropology, English, fine arts, history of the country in the student's major interest, and linguistics. Language majors should acquire a reading knowledge of a second foreign language.

Requirements for the B.S. in education degree with a comprehensive program in a modern foreign language are stated in the *College of Education* section of this catalog. Students wishing to complete teacher certification requirements as A.B. degree candidates should refer to the *College of Arts and Sciences* section for an explanation of the requirements. Prospective teachers are urged to spend at least one quarter in a country of their major language.

A minor requiring a minimum of 21 hours of language courses beyond 213 is offered in French, German, or Spanish. A grade of C or better must be received in a course for those hours to count toward a minor. There are no specific course requirements, but the student should observe prerequisites and course sequences. A student should consult the chairman of the majors committee in modern languages to develop a minor.

A student who is being certified in one high school or special fields major can be certified in a language minor area (French, German, or Spanish) by completing 45 credit hours in the minor

language, including: 341-342-343 (12 hours); one of 348, 349, 354, 355, or 356 (4 hours); one of 437 or 439 (3 hours); and two or more hours of literary studies. Depending on the student's background, up to 24 hours of beginning and intermediate language (111-213) may be waived, with the waived hours noted on the student's transcript.

Language laboratory facilities include 150 student booths with individual tape recorders, as well as a computer lab with 24 stations. Classrooms have speakers connected to a high-fidelity central console which can provide recorded material for various classes.

The department has chapters of Delta Phi Alpha and Phi Sigma Iota. The following study abroad programs are available through the department. 1: *Austria*: Spring Quarter in Salzburg offers courses Beginning through Advanced German. *France*: Spring Quarter in Tours offers courses Beginning through Advanced French. *Canada*: Summer Quarter in Quebec offers Beginning and Intermediate French, and History Department courses. *Mexico*: 1) Portales — Winter Quarter in Merida offers Intermediate Spanish and a course in Latin American Area Studies. 2) Zapata — Spring Quarter in Xalapa offers Beginning and Intermediate Spanish. 3) Olmeca — Summer in Xalapa (7 weeks) offers a wide range of courses, including some in English.

For information on the honors tutorial programs in French and Spanish, see catalog section on the *Honors Tutorial College*.

Department of Classical Languages

Greek and Latin Languages, as well as classical archaeology and classical languages in English, are offered through the Department of Classical Languages.

The Latin major requirement for the A.B. degree is a minimum of 39 hours above courses 111-112-113, with at least nine hours of 400-level courses consisting of CLNG 401, LAT 433, and other 400-level work in Latin.

A major in Greek is not offered, but Latin majors, especially those who are planning graduate work, are encouraged to take as much Greek as they can.

African and Asian Literatures in English

Ohio University offers courses at both the undergraduate and graduate levels in the literatures of Africa and Asia. The Department of Linguistics teaches Southeast Asian literature and the Department of English teaches courses in African and Oriental literatures. Students wishing to fulfill requirements for the undergraduate certificate or the M.A. degree in either African or Southeast Asian studies should consult the departments concerned and the appropriate area studies director. (For description of the Southeast Asian literature courses see index; for courses in African and Oriental literatures, see English Language and Literature in the *Courses of Instruction* section.)

Arabic (Middle Eastern)

- 111 Elementary Arabic (4)**
(fall) Beginning course of 3-qr 1st-yr sequence.
- 112 Elementary Arabic (4)** (2T)
Prereq: 111 or equiv. (winter) Continuation of 111.
- 113 Elementary Arabic (4)** (2T)
Prereq: 112 or equiv. (spring) Continuation of 112.
- 211 Intermediate Arabic (4)** (2T)
Prereq: 113 or equiv. (fall) 1st course of 3-qr intermediate-level sequence.
- 212 Intermediate Arabic (4)** (2T)
Prereq: 211 or equiv. (winter) Continuation of 211.
- 213 Intermediate Arabic (4)** (2T)
Prereq: 212 or equiv. (spring) Continuation of 212.

Chinese (Asian)

- 111 Elementary Chinese (4)**
(fall) Beginning course of 3-qr 1st-yr sequence.
- 112 Elementary Chinese (4)** (2T)
Prereq: 111 or equiv. (winter) Continuation of 111.
- 113 Elementary Chinese (4)** (2T)
Prereq: 112 or equiv. (spring) Continuation of 112.
- 211 Intermediate Chinese (4)** (2T)
Prereq: 113 or equiv. (fall) 1st course of 3-qr intermediate-level sequence.
- 212 Intermediate Chinese (4)** (2T)
Prereq: 211 or equiv. (winter) Continuation of 211.
- 213 Intermediate Chinese (4)** (2T)
Prereq: 212 or equiv. (spring) Continuation of 212.
- 311 Advanced Chinese (4)**
Prereq: 213 or equiv. (fall) Beginning of advanced-level sequence.
- 312 Advanced Chinese (4)**
Prereq: 311 or equiv. (winter) Continuation of 311.
- 313 Advanced Chinese (4)**
Prereq: 312 or equiv. (spring) Continuation of 312.

Classical Archaeology

- 201 Introduction to Archaeology — Egypt (5)** (2H)
(winter, 1986) Aims, methods, and techniques; general types of archaeological work and excavation. Open to students who have had 203 and/or 352, as well as beginners.
- 203 Introduction to Archaeology — Rome (5)** (2H)
(winter, 1985) *H. Hultgren*. Similar to 201, but with emphasis on Roman sites and antiquities. Open to students who have had 201 and/or 352, as well as to beginners.
- 352 Archaeology of Greece (5)**
Prereq: 201 or 203; or 18 hrs foreign language; or 12 hrs history or art history. (spring) Archaeology of Greece and Aegean Islands, with emphasis on Minoan and Mycenaean civilizations.

Classical Languages in English

The lectures and readings for these courses are in English, and the courses may count as part of the humanities area requirement of the College of Arts and Sciences. With the exception of course 401, which is required for a major in Latin, these courses cannot count toward a major in a foreign language or as part of the foreign language requirement of the College of Arts and Sciences.

- 127 Greek and Latin Words in English (4)** (2H)
(winter, spring) General and technical vocabulary derived from Greek and Latin. No knowledge of Greek or Latin required. No credit toward meeting foreign language requirement.
- 234 Classical Mythology (4)** (2H)
Introduction to classical mythology; readings and discussions of myths and their interpretations. No knowledge of Greek or Latin required. No credit toward meeting foreign language requirement.
- 235 Classical Literature in Translation (4)** (2H)
Reading of Greek and Latin literature in English translation. May be counted as part of requirements for humanities of College of Arts and Sciences. May not be counted toward major in Latin. No knowledge of Greek or Latin required. No credit toward meeting foreign language requirement.
- 236 Classical Literature in Translation (4)** (2H)
Continuation of 235.
- 237 Classical Literature in Translation (4)** (2H)
Continuation of 236.

401 The Life of the Romans (3)

Prereq: 12 hrs CLNG or 12 hrs history and antiquities. (on demand) Family, house, transportation, public amusements. Illustrations from archaeological evidence. No knowledge of Latin required. No credit toward meeting foreign language requirement.

French (Romance)

111 Elementary French (4) (2H)

Beginning course of 3-qtr, 1st-yr sequence. Basic grammatical concepts and patterns. Emphasis on development of reading, listening, comprehension, speaking, and writing skills. Basic text and workbook used. Lab required.

112 Elementary French (4) (2H)

Prereq: 111. Continuation of 111. Basic text, workbook, and readings used. Lab required.

113 Elementary French (4) (2H)

Prereq: 112. Continuation of 112. Basic text, workbook, and readings used. Lab required.

114 Intensive Elementary French (12) (2H)

Intensive development of basic language skills and grammatical principles. Equivalent to 1 yr of beginning language (111-112-113). Lab required.

211 Intermediate French (4) (2H)

Prereq: 113 or 2 or 3 yrs h.s. French. 1st course of 3-qtr intermediate-level sequence. Intensive review of grammar. Additional readings with discussion in French. Supplemental cultural material. Lab required.

212 Intermediate French (4) (2H)

Prereq: 211 or perm. Continuation of 211.

213 Intermediate French (4) (2H)

Prereq: 212 or 4 yrs h.s. French. Reading and discussion of selected modern works. Completion of 213 fulfills foreign language requirement of College of Arts and Sciences.

235 Oral Interpretation of French Literature (1-4, max 6)

Prereq: 113 or perm. Discussion and practice of oral interpretive techniques and presentation of poetic, dramatic, and narrative texts in French.

298 Independent Study in French (1-2, max 6)

Prereq: 213 or perm of instructor. Reading and discussion of assigned materials (books, periodicals, films, tapes) on specific topics involving French language. Does not count toward major or minor. Does not satisfy language requirement.

341 Advanced Conversation and Composition (4) (2H)

Prereq: 213 or perm. Conversation based on assigned topics. Writing of short compositions which are also discussed in class.

342 Advanced Conversation and Composition (4) (2H)

Prereq: 341 or perm. Continuation of speaking with more emphasis on writing skills.

343 Advanced Conversation and Composition (4) (2H)

Prereq: 342 or perm. Emphasis on writing.

348 French Civilization and Culture (4) (2H)

Prereq: 213 or perm. (fall, winter) Social, political, and cultural history of France from Middle Ages to Revolution. Readings, discussions, class reports, and term papers.

349 French Civilization and Culture (4) (2H)

Prereq: 213 or perm. (spring) Continuation of 348, covering 1799 to present. Problems of France in modern world.

355 Introduction to French Literature (4) (2H)

Prereq: 213. Reading and discussion of major French literary works from Middle Ages through 18th century.

356 Introduction to French Literature (4) (2H)

Prereq: 213. Extensive reading and discussion of major French literary works of 19th and 20th centuries.

415 French Literature of the Renaissance (4)

Prereq: 355 and 356. Major 16th-century writers.

416 French Literature of the Renaissance (4)

Prereq: 355 and 356. Continuation of 415.

418 17th Century French Literature (4)

Prereq: 355 and 356. Works by numerous authors, including at least some of following: Descartes, Pascal, Mme de La Fayette, La Rochefoucauld, La Bruyere, La Fontaine, and Boileau.

419 17th Century French Literature (4)

Prereq: 355 and 356. Major plays of Corneille, Racine, and Moliere.

423 18th Century (4)

Prereq: 355 and 356. French literature and thought in Age of Enlightenment.

424 18th Century (4)

Prereq: 355 and 356. Continuation of 423.

425 Romanticism (4)

Prereq: 355 and 356. Romanticism in drama, poetry, and fiction of 1st half of 19th century.

426 Realism and Naturalism (4)

Prereq: 355 and 356. Fiction and drama of 2nd half of 19th century.

427 French Poetry in the Second Half of the 19th Century (4)

Prereq: 355 and 356. Poetry of Leconte de Lisle, Heredia, Baudelaire, Verlaine, Rimbaud, and Mallarme.

429 20th Century French Literature I (4)

Prereq: 355 and 356. Works by various authors, including at least some of following: Anouilh, Apollinaire, Beckett, Camus, Gide, Giraudoux, Ionesco, Malraux, Mauriac, Proust, Robbe-Grillet, Sartre, Valery.

431 20th Century French Literature II (4)

Prereq: 355 and 356. Works by various authors, including at least some of those listed in 429. During any 2-yr period, all or most required readings for 429 and 431 will differ.

433 20th Century French Literature III (4)

Prereq: 355 and 356. Study in depth of genre, theme, work, or major figure of 20th century.

435 Proseminar (1-4, max 12)

Prereq: perm. Subject will vary. May be repeated when subject changes.

437 Applied Phonetics (4)

Prereq: perm. (fall) Advanced study of International Phonetic Alphabet and transcription practice in French.

439 Modern French Usage (4)

Prereq: 343 or perm. (winter) Finer points of grammar. Practice in composition and analysis of texts.

441 Stylistics (4)

Prereq: 343 or perm. (spring) Composition. *Explication de texte*. Translation of English into French. Study of French prosody.

498 Independent Study in French (1-2, max 4)

Prereq: 8 credits at 300 level or perm of dept chairman. Directed individual readings, discussion, and reports in language at advanced level. Does not count toward 400-level hrs required for major. Maximum of 2 credits may count toward minor.

Foreign Literatures in English

The lectures and readings for these courses are in English and are aimed at the entire University community. While they are not to be counted for a major in a modern foreign language, these courses may be counted toward fulfilling a part of the requirements for the humanities of the College of Arts and Sciences. No credit toward meeting the foreign language requirement.

334 Portuguese and Brazilian Literature in English (4) (2T)

Literature of Portugal or literature of Brazil in English translation. May be repeated for credit when subject changes.

- 335 Italian Literature in English (4) (2H)**
Famous literary works of best Italian authors, presented in English. May be repeated for credit when subject changes.
- 336 Spanish Literature in English (4) (2H)**
Topics may deal with either Spanish or Latin American literature. May be repeated for credit when topic changes.
- 337 French Literature in English (4) (2H)**
Literary works by authors of French expression, read and discussed in English. May be repeated for credit when subject changes.
- 338A German Literature in English (4) (2H)**
Survey of masterpieces of German literature, presented in English. May be repeated for credit when subject changes.
- 338B German Novel in English (4) (2H)**
Introduction to major German, Swiss, and Austrian novelists in English translation.
- 339A Russian Literature in English (4)**
Survey of Russian literature from beginnings to revolution, presented in English.
- 339B Soviet Literature in English (4)**
Major developments of Russian literature from 1917 to present day.

German (Germanic)

- 111 Elementary German (4) (2H)**
Introduction to pronunciation and basic grammar. Development of comprehension and speaking skills. Lab required. Beginning course of 3-qr 1st-yr sequence.
- 112 Elementary German (4) (2H)**
Prereq: 111. Continuation of 111. Lab required.
- 113 Elementary German (4) (2H)**
Prereq: 112. Continuation of 112. Continued development of skills of oral and written production and comprehension. Lab required.
- 114 Intensive Elementary German (12) (2H)**
Intensive development of basic language skills and grammatical principles. Equiv to 1 yr of beginning language (111-112-113). Lab required.
- 211 Intermediate German (4) (2H)**
Prereq: 113 or 2 or 3 yrs h.s. German. Continued development of listening comprehension, reading, writing, and speaking skills. Grammar review. Lab required. 1st course of 3-qr intermediate-level sequence.
- 212 Intermediate German (4) (2H)**
Prereq: 211 or perm. Continuation of 211. Emphasis on discussion of modern texts. Continued development of listening comprehension and speaking and writing skills. Lab required.
- 213 Intermediate German (4) (2H)**
Prereq: 212 or 4 yrs h.s. German. Modern German texts are read and form basis for discussions and written assignments. Completion of 213 fulfills foreign language requirement of College of Arts and Sciences.
- 235 German Drama on Stage (2-4)**
Prereq: 211. (winter) Presentation of German drama on stage. Private coaching in pronunciation and inflection of German. Credit varies according to role of student. May be repeated for credit with perm.
- 298 Independent Study in German (1-2, max 6)**
Prereq: 213 or perm of instructor. Reading and discussion of assigned materials (books, periodicals, films, tapes) on specific topics involving German language. Does not count toward major or minor. Does not satisfy language requirement.
- 341 Advanced Conversation and Composition (4) (2H)**
Prereq: 213 or perm.
- 342 Advanced Conversation and Composition (4) (2H)**
Prereq: 341 or perm.
- 343 Advanced Conversation and Composition (4) (2H)**
Prereq: 342 or perm.
- 348 German Culture and Civilization (4) (2H)**
Prereq: 213 or perm. (fall, winter) Historical, intellectual, and artistic aspects of German, Austrian, and Swiss culture from earliest times to present.
- 349 German Culture and Civilization (4) (2H)**
Prereq: 213 or perm. (spring) Continuation of 348.
- 355 Introduction to German Literature (4) (2H)**
Prereq: 213. Study of major literary works, with emphasis on 18th and 19th centuries.
- 356 Introduction to German Literature (4) (2H)**
Prereq: 213. Study of major literary works of 20th century.
- 425 19th Century German Literature (4)**
Prereq: 355 and 356.
- 426 19th Century German Literature (4)**
Prereq: 355 and 356.
- 427 19th Century German Literature (4)**
Prereq: 355 and 356.
- 429 20th Century German Literature (4)**
Prereq: 355 and 356.
- 430 20th Century German Literature (4)**
Prereq: 355 and 356.
- 431 20th Century German Literature (4)**
Prereq: 355 and 356.
- 433 German Lyric Poetry (4)**
Prereq: 355 and 356. Interpretative and critical study of German lyric poetry.
- 435 Proseminar (1-4, max 12)**
Prereq: perm. Intensive analysis of major author, literary genre, or theme. When subject is changed, student may reenroll.
- 437 Phonology (4)**
Prereq: perm. (fall) Problems in description and teaching of German sound system. Training in phonetic and phonemic transcription. Pronunciation drills. Contrastive analysis.
- 439 Grammatical Structure (4)**
Prereq: 343 or perm. (winter) Selected problems in analysis and classroom presentation of German morphology and syntax.
- 441 Stylistics (4)**
Prereq: 343 or perm. (spring) Advanced writing and stylistic analysis. Practice in variety of nonfiction prose techniques.
- 447 Readings in German Literature from the 12th through the 17th Centuries (4)**
Prereq: 355 and 356. Literature of Courtly Period, Renaissance, and Reformation and Baroque.
- 448 Readings in German Literature from the 12th through the 17th Centuries (4)**
Prereq: 355 and 356. Continuation of 447.
- 453 The Age of Goethe (4)**
Prereq: 355 and 356. Major works of Lessing, Schiller, and Goethe.
- 454 The Age of Goethe (4)**
Prereq: 355 and 356. Continuation of 453. See 453 for description.
- 455 The Age of Goethe (4)**
Prereq: 355 and 356. Continuation of 453 and 454. See 453 for description.
- 498 Independent Study in German (1-2, max 4)**
Prereq: 8 credits at 300 level or perm of dept chairman. Directed individual readings, discussion, and reports in language at advanced level. Does not count toward 400-level hrs required for major. Maximum of 2 credits may count toward minor.

Greek

- 111 Beginning Greek (4) (2H)**
Grammar, vocabulary, and reading of ancient Attic Greek.
- 112 Beginning Greek (4) (2H)**
Prereq: 111. Continuation of 111. See 111 for description.

- 113 Beginning Greek (4) (2H)**
Prereq: 112. Continuation of 111-112. See 111 for description.
- 211 Greek Prose and Poetry (3) (2H)**
Prereq: 113. Review of language principles. Readings adapted to needs and interests.
- 212 Greek Prose and Poetry (3) (2H)**
Prereq: 211. Continuation of 211. See 211 for description.
- 213 Greek Prose and Poetry (3) (2H)**
Prereq: 212. Continuation of 211-212. See 211 for description. Passing 213 fulfills foreign language requirements of College of Arts and Sciences for A.B. degree.
- 409 Advanced Greek Readings (2-4, max 18)**
Prereq: 21 hrs. (on demand) Selections adapted to needs and interests.

Indonesian/Malaysian (Asian)

- 111 Elementary Indonesian/Malaysian (4)**
(fall) Beginning course of 3-qr 1st-yr sequence.
- 112 Elementary Indonesian/Malaysian (4) (2T)**
Prereq: 111 or equiv. (winter) Continuation of 111.
- 113 Elementary Indonesian/Malaysian (4) (2T)**
Prereq: 112 or equiv. (spring) Continuation of 112.
- 211 Intermediate Indonesian/Malaysian (4)**
Prereq: 113 or equiv. (fall) 1st course of 3-qr intermediate-level sequence.
- 212 Intermediate Indonesian/Malaysian (4)**
Prereq: 211 or equiv. (winter) Continuation of 211.
- 213 Intermediate Indonesian/Malaysian (4)**
Prereq: 212 or equiv. (spring) Continuation of 212.
- 311 Advanced Indonesian/Malaysian (4)**
Prereq: 213 or equiv. (fall) Beginning of advanced-level sequence.
- 312 Advanced Indonesian/Malaysian (4)**
Prereq: 311 or equiv. (winter) Continuation of 311.
- 313 Advanced Indonesian/Malaysian (4)**
Prereq: 312 or equiv. (spring) Continuation of 312.
- 499 Special Studies (1-3)**
Independent study of topic of interest in Indonesian/Malaysian language or literature.

Italian (Romance)

- 111 Elementary Italian (4) (2H)**
(fall) Beginning course of 3-qr 1st-yr sequence.
- 112 Elementary Italian (4) (2H)**
Prereq: 111. (winter) Continuation of 111.
- 113 Elementary Italian (4) (2H)**
Prereq: 112. (spring) Continuation of 112.
- 211 Intermediate Italian (4) (2H)**
Prereq: 113 or 2 or 3 yrs h.s. Italian. (fall) 1st course of 3-qr intermediate-level sequence.
- 212 Intermediate Italian (4) (2H)**
Prereq: 211 or perm. (winter) Continuation of 211.
- 213 Intermediate Italian (4) (2H)**
Prereq: 212 or 4 yrs h.s. Italian. (spring) Successful completion of 213 fulfills foreign language requirement of College of Arts and Sciences.
- 298 Independent Study in Italian (1-2, max 6)**
Prereq: 213 or perm of instructor. Reading and discussion of assigned materials (books, periodicals, films, tapes) on specific topics involving Italian language. Does not satisfy language requirement. Does not count toward major.
- 341 Advanced Conversation and Composition (4) (2H)**
Prereq: 213 or perm. (fall)

- 342 Advanced Conversation and Composition (4) (2H)**
Prereq: 341 or perm.
- 343 Advanced Conversation and Composition (4) (2H)**
Prereq: 342 or perm.
- 348 Italian Civilization and Culture (4) (2H)**
Prereq: 213 or perm. (winter) Historical and cultural development of Italy from Middle Ages to Renaissance.
- 349 Italian Civilization and Culture (4) (2H)**
Prereq: 213 or perm. (spring) Continuation of 348, covering period from Renaissance to present.
- 355 Introduction to Italian Literature (4)**
Prereq: 213 or perm.
- 356 Introduction to Italian Literature (4)**
Prereq: 213 or perm.

Japanese (Asian)

- 111 Elementary Japanese (4)**
(fall) Beginning course of 3-qr 1st-yr sequence.
- 112 Elementary Japanese (4) (2T)**
Prereq: 111 or equiv. (winter) Continuation of 111.
- 113 Elementary Japanese (4) (2T)**
Prereq: 112 or equiv. (spring) Continuation of 112.
- 211 Intermediate Japanese (4) (2T)**
Prereq: 113 or equiv. (fall) First course of 3-qr intermediate-level sequence.
- 212 Intermediate Japanese (4) (2T)**
Prereq: 211 or equiv. (winter) Continuation of 211.
- 213 Intermediate Japanese (4) (2T)**
Prereq: 212 or equiv. (spring) Continuation of 212.

Latin

- 111 Beginning Latin (4) (2H)**
Grammar, vocabulary, and reading.
- 112 Beginning Latin (4) (2H)**
Prereq: 111. Continuation of 111. See 111 for description.
- 113 Beginning Latin (4) (2H)**
Prereq: 112. Continuation of 111-112. See 111 for description.
- 211 Intermediate Latin (4) (2H)**
Prereq: 113 or 2-3 yrs h.s. Latin. Review of h.s. Latin with reading of easy prose.
- 212 Intermediate Latin (4) (2H)**
Prereq: 211. Continuation of 211. Reading of Vergil.
- 213 Intermediate Latin (4) (2H)**
Prereq: 212. Continuation of 211-212. See 212 for description. Passing 213 fulfills foreign language requirements of College of Arts and Sciences for A.B. degree.
- 351 Latin Prose and Poetry (4) (2H)**
Prereq: 213 or 4 yrs h.s. Latin, or 3 yrs h.s. Latin and perm. Review of essential Latin. Reading of Cicero's essays, play of Plautus or Terence, Horace's *Odes* and *Epodes*.
- 352 Latin Prose and Poetry (4) (2H)**
Prereq: 213 or 4 yrs h.s. Latin, or 3 yrs h.s. Latin and perm. Continuation of 351. See 351 for description.
- 353 Latin Prose and Poetry (4) (2H)**
Prereq: 213 or 4 years h.s. Latin or 3 yrs h.s. Latin and perm. Continuation of 351-352. See 351 for description.

364 The Teaching of High School Latin (3)

Prereq: 213. (on demand) Content and methods of teaching h.s. Latin courses.

411 Latin Literature of the Republic (3)

Prereq: 353. Selections from works of Plautus, Terence, Caesar, Cicero, Lucretius, Catullus, and Sallust.

412 Latin Literature of the Republic (3)

Prereq: 353. Continuation of 411. See 411 for description.

413 Latin Literature of the Republic (3)

Prereq: 353. Continuation of 411-412. See 411 for description.

415 Latin Literature of the Early Empire (3)

Prereq: 353. Selections from works of Vergil, Horace, Livy, Ovid, Martial, Tacitus, Juvenal, and Pliny the Younger.

416 Latin Literature of the Early Empire (3)

Prereq: 353. Continuation of 415. See 415 for description.

417 Latin Literature of the Early Empire (3)

Prereq: 353. Continuation of 415-416. See 415 for description.

419 Readings in Latin Literature (3)

Prereq: 353. Selections complement students' other readings in Latin literature.

420 Readings in Latin Literature (3)

Prereq: 353. Continuation of 419. See 419 for description.

421 Readings in Latin Literature (3)

Prereq: 353. Continuation of 419-420. See 419 for description.

433 Advanced Latin Syntax (3)

Prereq: 353. (on demand) Writing of Latin prose.

440 Special Work in Latin (1-6, max 12)

Prereq: 353. (on demand) Specialized work in selected phases of classical study.

Modern Languages (Introductory Culture and Civilization; Professional Courses)

Note: 250A-D, 410, and 445 do not count toward the major. With departmental approval 250A-D may be applied to the humanities requirement.

250A Field Studies in Austria (1-4, max 4)

Prereq: perm. Designed to introduce participants in study abroad program to various aspects of life in target country.

250B Field Studies in France (1-4, max 4)

Prereq: perm. Designed to introduce participants in study abroad program to various aspects of life in target country.

250C Field Studies in Mexico (1-4, max 4)

Prereq: perm. Designed to introduce participants in study abroad program to various aspects of life in target country.

410 The Language Laboratory: Media in Foreign Language Teaching (3)

Prereq: foreign language courses numbered 213 or courses in linguistics. Use of language lab and associated media as correlated with modern language classroom; instruction in selection, preparation, and use of instructional materials and tests, and in successful operation of lab and classroom equipment. Required of majors who plan to teach.

445 Teaching of Modern Foreign Languages (3)

Prereq: perm. Not to be counted as hours above 200 for A.B. degree. Study, demonstration, and use of methods and materials for effective modern foreign language instruction. Required of majors who plan to teach.

Portuguese (Romance)

(Portuguese courses are offered only upon sufficient demand.)

111 Elementary Portuguese (4)

(fall) Beginning course of 3-qr 1st-yr sequence.

112 Elementary Portuguese (4)

Prereq: 111. (winter) Continuation of 111.

113 Elementary Portuguese (4)

Prereq: 112. (spring) Continuation of 112.

211 Intermediate Portuguese (4)

Prereq: 113 or 2 or 3 yrs h.s. Portuguese. (fall) 1st course of 3-qr intermediate-level sequence.

212 Intermediate Portuguese (4)

Prereq: 211 or perm. (winter) Continuation of 211.

213 Intermediate Portuguese (4)

Prereq: 212 or 4 yrs h.s. Portuguese. (spring) Successful completion of 213 fulfills language requirement of College of Arts and Sciences.

Russian (Slavic)

111 Elementary Russian (4)

(2H)

(fall) Beginning course of 3-qr 1st-yr sequence.

112 Elementary Russian (4)

(2H)

Prereq: 111. (winter) Continuation of 111.

113 Elementary Russian (4)

(2H)

Prereq: 112. (spring) Continuation of 112.

211 Intermediate Russian (4)

(2H)

Prereq: 113 or 2 or 3 yrs h.s. Russian. (fall) Continued language study. Review of grammar. 1st course of 3-qr intermediate-level sequence.

212 Intermediate Russian (4)

(2H)

Prereq: 211 or perm. (winter) Continuation of 211. Extensive reading, writing, and oral practice.

213 Intermediate Russian (4)

(2H)

Prereq: 212 or 4 yrs h.s. Russian. (spring) Accelerated reading, writing, and oral practice. Completion of 213 fulfills foreign language requirement of College of Arts and Sciences.

298 Independent Study in Russian (1-2, max 6)

Prereq: 213 or perm of instructor. Reading and discussion of assigned materials (books, periodicals, films, tapes) on specific topics involving Russian language. Does not count toward major or minor. Does not satisfy language requirement.

341 Advanced Conversation and Composition (4)

(2H)

Prereq: 213 or perm. (fall)

342 Advanced Conversation and Composition (4)

(2H)

Prereq: 341 or perm. (winter)

343 Advanced Conversation and Composition (4)

(2H)

Prereq: 342 or perm. (spring)

348 The Cultural History of Russia (4)

(2H)

Prereq: 213 or perm. Cultural heritage of Russian people. Origin of Russian literature. Russian chronicles. 3 cycles of *bylina*. Russian ballads. Russian folklore. Readings and lectures in Russian.

349 The Cultural History of Russia (4)

(2H)

Prereq: 213 or perm. Continuation of 348.

355 Introduction to Russian Literature (4)

(2H)

Prereq: 213. Analysis of genres and literary movements.

356 Introduction to Russian Literature (4)

(2H)

Prereq: 213. Continuation of 355.

397 Introduction to the History of the Russian Language (3)

Prereq: 213 or 4 yrs h.s. Russian. (spring) Russian phonology, morphology, and syntax from Common Slavic to present. East, West, and South Slavic languages.

Southeast Asian Literatures in Translation

340 Traditional Literature of Southeast Asia (3) (2T)
(winter) Survey of traditional literature of Southeast Asia in translation.

345 Modern Literature of Southeast Asia (3) (2T)
(spring) Survey of modern literature of Southeast Asia in translation.

Spanish (Romance)

111 Elementary Spanish (4)
Development of comprehension, speaking, and reading skills. Basic grammar. Lab required. Beginning course of 3-qr 1st-yr sequence.

112 Elementary Spanish (4) (2T)
Prereq: 111. Continuation of 111.

113 Elementary Spanish (4) (2T)
Prereq: 112. Continuation of 112.

114 Intensive Elementary Spanish (12) (2T)
Intensive development of basic language skills and grammatical principles. Equivalent to 1 yr of beginning language (111-112-113). Lab required.

211 Intermediate Spanish (4) (2T)
Prereq: 113 or 2 or 3 yrs. h.s. Spanish. Intensive review of grammar. Additional readings and discussion in Spanish. Supplemental cultural material. Lab required. 1st course of 3-qr intermediate-level sequence.

212 Intermediate Spanish (4) (2T)
Prereq: 211 or perm. Continued review. Additional literary readings with discussion in Spanish.

213 Intermediate Spanish (4) (2T)
Prereq: 212 or 4 yrs h.s. Spanish. Selected readings of 20th-century Spanish dramatists, poets, novelists, and essayists with discussion in Spanish. Completion of 213 fulfills foreign language requirement of College of Arts and Sciences.

298 Independent Study in Spanish (1-2, max 6)
Prereq: 213 or perm of instructor. Reading and discussion of assigned materials (books, periodicals, films, tapes) on specific topics involving Spanish language. Does not count toward major or minor. Does not satisfy language requirement.

341 Advanced Conversation and Composition (4) (2T)
Prereq: 213 or perm. Conversation based on assigned topics. Writings of short compositions which are also discussed in class.

342 Advanced Conversation and Composition (4) (2T)
Prereq: 341 or perm. Continuation of speaking with more emphasis on writing skills.

343 Advanced Conversation and Composition (4) (2T)
Prereq: 342 or perm. Emphasis on writing.

348 Spanish Civilization and Culture (4) (2H)
Prereq: 213 or perm. (fall, winter) Historical, social, political, and cultural readings about Spain.

349 Spanish American Civilization and Culture (4) (2T)
Prereq: 213 or perm. (spring) Lectures in Spanish on Indian civilizations, colonial period, 19th and 20th centuries.

354 Introduction to Spanish Literature (4) (2H)
Prereq: 213. Selected Spanish and Spanish American plays. Historical developments and trends in Hispanic theater. Terminology. Readings, lectures, and discussion.

355 Introduction to Spanish Literature (4) (2H)
Prereq: 213. Selected Spanish and Spanish American novels and shorter fiction. Historical development and trends in Hispanic narrative form. Terminology. Readings, lectures, and discussion.

356 Introduction to Spanish Literature (4) (2H)
Prereq: 213. Selected Spanish and Spanish American poetry. Historical development and tendencies in Hispanic verse. Movements and terminology. Introduction to essay as art form. Readings, lectures, and discussion.

425 19th Century Spanish Literature (1800-1850) (4)
Prereq: 354, 355, and 356. Romanticism, *costumbrismo*, and other trends in drama, essay, and poetry.

427 19th Century Spanish Literature (1850-1900) (4)
Prereq: 354, 355, and 356. Emphasis on realism and naturalism in novel.

429 Generation of '98 (4)
Prereq: 354, 355, and 356. Representative works by Azorin, Baroja, Machado, Unamuno, Valle-Inclan, Benevente, Ortega y Gasset, and other authors.

432 20th Century Spanish Literature (4)
Prereq: 354, 355, and 356. Study of poetry, drama, and novel in Spain since 1925. Works by various authors including at least some of following: Lorca, Salinas, Guillen, Aleixandre, Casona, Buero Vallejo, Sastre, Cela, Delibes, Hierro, Bousoño, Martín-Santos, Benet.

435 Proseminar (1-4, max 12)
Prereq: perm. Subject will vary. May be repeated when subject changes.

437 Applied Phonetics (4)
Prereq: perm. (fall) Systematic description of segmental and prosodic elements of Spanish system, particularly as contrasted with English.

439 Modern Spanish Usage (4)
Prereq: 343 or perm. Syntactical and grammatical structure of modern Spanish.

441 Stylistics (4)
Prereq: 343 or perm. Analysis of literary styles and study of techniques used to acquire correct style in writing Spanish.

443 Survey of Spanish American Literature (4)
Prereq: perm. Main trends of Spanish American literature from colonial period to *Modernismo*.

444 Survey of Spanish American Literature (4)
Prereq: perm. Continuation of 443. Main trends of Spanish American literature from *Modernismo* to contemporary period.

447 Themes from Spanish American Prose (4)
Prereq: perm.

448 Contemporary Spanish American Literature (4)
Prereq: perm.

453 Drama of the Golden Age (4)
Prereq: perm. Works by Lope de Vega, Tirso de Molina, Juan Ruiz de Alarcón, Calderón, and related dramatists.

455 Novel of the Golden Age (4)
Prereq: perm. Picaresque novel, Cervantes' *novelas ejemplares* and other trends in novel of 16th and 17th centuries.

458 Don Quijote de la Mancha (4)
Prereq: perm. Intensive study of Part One and Part Two of Spain's greatest novel. Biographical material concerning Miguel de Cervantes, author of *Quijote*.

498 Independent Study in Spanish (1-2, max 4)
Prereq: 8 credits at 300 level or perm of dept chairman. Directed individual readings, discussion, and reports in language at advanced level. Does not count toward 400-level hrs required for major. Maximum of 2 credits may count toward minor.

Swahili (African)

111 Elementary Swahili (4)
(fall) Beginning course of 3-qr 1st-yr sequence.

112 Elementary Swahili (4) (2T)
Prereq: 111 or equiv. (winter) Continuation of 111.

113 Elementary Swahili (4) (2T)
Prereq: 112 or equiv. (spring) Continuation of 112.

211 Intermediate Swahili (4)
Prereq: 113 or equiv. (fall) 1st course of 3-qr intermediate-level sequence.

- 212 Intermediate Swahili (4)**
Prereq: 211 or equiv. (winter) Continuation of 211.
- 213 Intermediate Swahili (4)**
Prereq: 212 or equiv. (spring) Continuation of 212.
- 311 Advanced Swahili (4)**
Prereq: 213 or equiv. (fall) Beginning of advanced-level sequence.
- 312 Advanced Swahili (4)**
Prereq: 311 or equiv. (winter) Continuation of 311.
- 313 Advanced Swahili (4)**
Prereq: 312 or equiv. (spring) Continuation of 312.

FRENCH

See Foreign Languages and Literatures.

GEOGRAPHY

The requirements of geography majors studying for the A.B. or B.S. degree are 50 quarter hours in approved geography courses including 101, 121, 130, 277, 311, 360, 470, and at least two courses from this group (201, 230, 325, 326, 327, 330, 331, 420, 421, 422, 429, 435) and one course from this group (240, 242, 340, 343, 345, 351, 352, 355). Completion of the above requirements automatically completes the College of Arts and Sciences requirement of nine hours in the major at the junior-senior level.

Majors are not permitted to take geography and required courses on a pass/fail basis.

Students wishing to pursue the B.S. degree must obtain a strong background in the natural sciences. The selection of specific courses will be dependent on the student's interest and the advice of the faculty.

A minor in geography will consist of a minimum of 28 hours including GEOG 101, 121, 130, and at least two other courses at the 200 level or above.

- 101 Elements of Physical Geography (5) (2N)**
Systematic survey of temperature, precipitation, atmospheric and oceanic circulation, and global systems of climate, soils, natural vegetation, and landforms. 4 lec, one 2-hr lab.
- 121 Elements of Cultural Geography (4) (2S)**
Examination of spatial dimensions of culture, emphasizing patterns of variation of selected cultural elements — language, religion, population, settlement, etc. — from spatial perspective and within particular spatial frameworks.
- 130 Economic Geography (4) (2S)**
Theoretical and empirical studies of locations of primary, secondary, and tertiary economic activities.
- 140 World Regional Geography: Third World (4) (2T)**
Survey of selected geographic themes: development; people and resources; human and physical environments; and cultural patterns in Latin America, Africa, the Middle East, and Monsoon Asia.
- 141 World Regional Geography: Industrial World (4) (2S)**
Survey of selected geographic themes: development; people and resources; human and physical environments; and cultural patterns in Anglo-America, Western Europe, Eastern Europe, the USSR, Japan, and Australia.
- 201 Environment and Man (4) (2A)**
Geographic survey of environmental changes caused by human activities. Focus on problems of pollution of air, water, and biosphere and interaction of humans with plant and animal communities.
- 230 Introduction to Urban Geography (4) (2S)**
Study of internal patterns of urban areas of North America.
- 240 Geography of Anglo-America (4) (2S)**
Regional survey of U.S. and Canada including topical treatment of environmental and cultural features and study of smaller regions.
- 242 Geography of Ohio (3)**
H. Wilhelm. Detailed regional study of physical background, settlement, and economic development.
- 260 Map Reading and Interpretation (4) (2A)**
H. Bloemer. Uses and abuses of maps. Interpretation of topographic and thematic maps. Emphasis on map analysis. 2 lec, one 2-hr lab.
- 277 Analysis of Geographical Data (4)**
Prereq: geography major. Introduction to quantitative problems in geography.
- 301 Advanced Physical Geography (4)**
Prereq: 101, 311 or 312. *R. Isaac.* Application of physical geographic principles to specific research problems.
- 311 Elements of Meteorology (5)**
Prereq: 101. *R. Isaac.* General survey of physical principles of weather. 4 lec, one 2-hr lab.
- 312 Climate (5)**
Prereq: 101 or 311. *R. Isaac.* Exchanges of energy and moisture and their significance in human utilization of earth's surface. 4 lec, one 2-hr lab.
- 313 Observations in Meteorology (2)**
Prereq: 101, 311. Lab experience in acquisition and measurement of meteorological parameters.
- 314 Practicum in Meteorological Forecasting (2-10)**
Prereq: 101, 311, 313, premeteorology major. Lab experience in preparation and dissemination of meteorological forecasts.
- 325 Systematic Political Geography (4)**
Prereq: 121 or perm. *B. Walter.* Systematic examination of basic approaches, topics, and spatial concepts in political geography, with case studies. Emphasis at nation-state level.
- 326 American Conservation Movement (4)**
Prereq: 4 hrs natural science. Topical survey of schools of thought, themes, and specific issues in American conservation in past century. 19th-century transcendental thinkers are baseline for survey. Contemporary environmental issues and debates provide capstone for course.
- 327 Resource Management (4)**
Prereq: 201 or perm. Themes in American environmental history, contemporary environmentalism, methods of resource assessment and management, and selected case studies in managing renewable resources.
- 328 American Rural Vernacular Architecture (4)**
Prereq: jr rank. Consideration of temporal and spatial characteristics of American rural vernacular buildings and importance of preserving ordinary structures.
- 330 Industrial Location (4)**
Prereq: 130 or perm. Factors in industrial location, theory, and applications in developmental planning.
- 331 Geography of Agricultural Activity (4)**
Prereq: 130 or perm. Agriculture examined from 4 viewpoints: evolution of agricultural systems; ecological analysis of traditional and modern agriculture; food and agricultural development (Third World emphasis); and problems and prospects in North American agriculture.
- 340 Geography of Western Europe (4)**
H. Wilhelm. Physical, cultural, and economic geography of western Europe.
- 343 Geography of Appalachia (4) (2S)**
H. Wilhelm. Topical and regional survey of Appalachia with emphasis on settlement and rural and urban land use. National role of Appalachia assessed especially in regard to coal, conservation, reclamation, and recreation.
- 345 Contemporary Southeast Asia (4) (2T)**
Survey of population, food production, natural resource exploitation, energy, physical base, and regional concept in Southeast Asia.

351 African Thematic Geography (4) (2T)

Prereq: 121 or perm. *F. Bernard, B. Walter*. Systematic examination of 4 selected themes relevant to modern geography of Africa. Emphasis on problems of development.

352 Africa: Regional Approaches (4)

Prereq: 121 or perm. *F. Bernard, B. Walter*. Regional survey of 1 of major areas of tropical Africa. (A) East, (B) West, (C) Equatorial, (D) Central and South.

355 Geography of Latin America (4) (2T)

Prereq: 101, 121, or perm. *L. Williams*. Regional survey of Latin America with emphasis on problems of social and economic development.

360 Map Making (5)

Prereq: geography major. *H. Bloemer*. Introduction to basic design principles of esthetically pleasing maps, emphasizing legibility and readability from map user's viewpoint. Map construction ranges from simple map compilation to multicolor composition and scale reduction.

361 Statistical Cartography (5)

Prereq: perm. *H. Bloemer*. Cartographic techniques of representing quantitative data on maps.

365 Air-Photo Interpretation (4)

Prereq: perm. *H. Bloemer*. Principles and techniques used in air-photo interpretation for geographers, geologists, military, community planners, and engineers.

375J Library Research and Writing (4) (1J)

Prereq: perm. *N. Bain, F. Bernard*. Research materials, methods of investigation and presentation of geographic data.

380 Remote Sensing (5)

Prereq: 365; GEOL 407 or perm. Synoptic analysis in both visual and digital form of spatial variations dealing with botanical, geological, and geographic phenomena.

420 Land Use Planning (4)

Prereq: 130, 230, or perm. *J. Cobban*. Survey of land use planning in U.S. Zoning, subdivision controls and modifications, rural land use, open space, state land use plans. Case studies from U.S. and Europe.

421 Environmental Planning (4)

Prereq: 420 or PSY 335. Planning in built and natural environments briefly surveying personal space, architectural space, small towns and neighborhoods, and emphasizing larger conceptual regions and nation.

422 Population Geography (4)

Prereq: 101, 121 or perm. *L. Williams*. Systematic survey of world population problems including distribution, composition, fertility, mortality, density, age-sex structure, and impact of these on world population growth and resources.

428 Landscape and Culture (4) (3S)

Prereq: sr rank. Consideration of the Anglo-American landscape as a key to understanding Anglo-American culture and its myths (e.g. frontier) and stereotypes (e.g. individualism).

429 Settlement Geography (4)

H. Wilhelm. Patterns and forms of rural settlement in terms of environmental, functional, and traditional effects.

435 Evolution of Planning (4)

J. Cobban. Evolution of urban planning in U.S. during 19th and 20th centuries. Housing, parks, ideal communities, intellectual attitudes, zoning and subdivision case law, federal intervention, present programs.

462 Advanced Cartography (5)

Prereq: 360, 361, or perm. *H. Bloemer*. Computer-aided cartography for quantitative data, culminating in application of cal-comp plotter.

470 Development of Geographic Thought (4)

Prereq: geography major or perm. *B. Walter, J. Cobban*. Philosophical examination of evolution of geography as academic discipline; historical theme covers major traditions, ideas, concepts, trends, controversies, and prominent geographers.

476 Field Methods (5-9)

Prereq: perm. Introduction to geographic field methods and techniques in rural and/or urban areas, involving field mapping and

recording, spatial sampling, interviewing, coding and visual recording, field analysis, and reporting and summarizing.

477 Quantitative Methods (4)

Prereq: perm. *R. Isaac*. Systematic survey of quantitative techniques employed by geographers.

485 Internship (max 15)

Prereq: upperdivision geography major. Provides qualifying students with credit for work-study experience in cartography, remote sensing, land use planning, resource management, and other fields of applied geography. Supervised by geography faculty and evaluated by on-the-job supervisor. Lengthy report culminates experience.

486 Practicum in Cartography and Remote Sensing (2-5)

Prereq: Geography 360; 361, 380, jr rank, geography major, and perm. Individualized undergraduate thesis-level work—theoretical or practical—in cartography and/or remote sensing.

490 Geographic Studies (1-5 max 5)

Prereq: perm, jr rank, max of 5 hrs. Supervised studies in fundamentals of geographic research.

494 Field Problems (4)

Prereq: geography major or perm. (spring) Fieldwork in Belize, involving 2-wk field trip in March followed by coursework in spring qtr. Surveying of tropical forest, savanna, and reef environments; local cultures; and archaeological sites. Research on field problem using standard geographic field methods.

GEOLOGICAL SCIENCES

Required courses for the B.S. degree in minimum preparation for a professional career in geological sciences or entry into graduate school are 101, 256, 314, 315, 330, 340, 350, 360, 413, 420, 421, 424, 462, 487 and at least two additional 400-level courses. In addition, the following extradepartmental courses are required: CHEM 141, 142, and 143, physics through 203 or 253, and mathematics through 263B.

The major requirement for the A.B. degree includes the following: 101, 211, 256, 310, 330, 340, 350, 360, 462, and at least two additional courses at the 400 level. Extradepartmental requirements include CHEM 121 and 122, PHYS 201, and MATH 118. Students entering the A.B. program should consult with the departmental undergraduate advisor regarding appropriate minors to be combined with the A.B. degree.

The Department of Geological Sciences also offers special professional programs in the fields of water resources and environmental geology. See special curricula in the College of Arts and Sciences.

A minor in geological sciences may be obtained by completing one of the following course sequences:

Surficial/Environmental: requires 101, 256, 310, 330, 432, 438, 480

Solid Earth/Geophysics: requires 101, 256, 310, 350, 360, 462, 485

Water Resources: requires 101, 256, 310, 330, 350, 480, 481

Geobiology: requires 101, 256, 310, 340, 350, 443, 446

Geochemistry: requires 101, 256, 314, 315, 413, 422.

101 Introduction to Geology (5) (2N)

Nature and distribution of earth materials and their utilization as natural resources; discussion of earth structure, earthquakes, mountain building, and continental drift; development of landscapes. 4 lec, 2 lab. Not open to students who have had 283.

201 Man and the Physical Environment (4) (2A)

Prereq: soph rank. Survey of geological aspects of environmental crisis. Focus on major environmental processes, immediate and extended influence of humans, and prospects for future of physical environment. Presupposes no background in sciences. 4 lec.

211 Introductory Oceanography (4) (2N)

Prereq: soph rank. Survey of physical, chemical, biological, and geological aspects of oceanography. 4 lec.

256 Historical Geology (4)

Prereq: 101, (winter) *T. Worsley*. Earth and life history emphasizing geologic development, stratigraphy, and fossil record of North America. 3 lec, 2 lab.

270 World Mineral Resources (3) (2A)

Prereq: soph rank. Major deposits of metal, nonmetallic, and fuel resources which form backbone of modern industry. Economics and basic geologic controls of mineral production reviewed. 3 lec with demonstrations. Not open to geology majors.

283 Geology for Engineers (5)

(fall) *S. Fisher*. Geologic principles applied to engineering projects and materials. 3 lec, 4 lab. Not open to students who have had 101.

291 Selected Topics in Geology (2)

Prereq: soph rank. 5-wk minicourses developed around specific topics in geology. **A. Earth Materials.** Characteristics of minerals and sedimentary, igneous, and metamorphic rocks. Not open to those who have had 101. **(2N) B. Glaciers and Glaciation.** Behavior of glaciers and effects of glaciation; causes of glaciation and prospects for future. **(2N) C. Geologic Development of North America.** Continental growth; character of marine invasions of North America; continental drift and mountain building. **(2N) D. Volcanoes and Earthquakes.** Origin of volcanic activity and earthquakes; characteristics of volcanic eruptions and features produced; effects of volcanoes and earthquakes on humans; prediction of earthquakes and volcanic eruptions. **(2N) E. Mineral Resources.** Types and origins of mineral resources; energy resources and effect on future society; current problems; energy shortages. **(2A) F. Fossils and Evolution.** Origin and development of life through geologic time. **(2N) G. Soils and Weathering.** Weathering of rocks and genetic relationship to major soil types. **(2N) I. Water and Pollution.** Study of hydrological cycle; occurrence and flow of surface water and groundwater; problems of water pollution. **(2A) K. Continental Drift.** Nontechnical analysis of revolution in earth sciences leading to continental drift and plate tectonics. **(2N)**

305 Introduction to Air Photo and Map Interpretation (2)

Prereq: 330, 360, or perm. (fall) *G. Smith*. Principles of use of topographic maps and aerial photographs for study and interpretation of geologic and geomorphic features. 1 lec, 2 lab.

310 Rocks and Minerals (5)

Prereq: 101, CHEM 142 or 142. (spring) *G. Heien*. Principles of crystallography, descriptive, and determinative mineralogy, and study of igneous, metamorphic, and sedimentary rocks designed for students in earth science education, geological science special curriculum programs, geological science minors, and related science majors. Not open to B.S. geology majors. 3 lec, 4 lab.

314 Crystallography (3)

Prereq: 101, CHEM 141. (winter) *G. Heien*. Elements of crystallography and introduction to crystal chemistry. 2 lec, 2 lab.

315 Mineralogy (5)

Prereq: 314, CHEM 142. (spring) *G. Heien*. Identification of minerals in hand specimen; introduction to x-ray diffraction for mineral identification. Formation and associations of minerals in different geologic environments. 3 lec, 4 lab.

330 Principles of Geomorphology (5)

Prereq: 101. (spring) *G. Smith*. Basic concepts of origin and development of landforms. Lab study of topographic maps and aerial photographs. 4 lec, 2 lab.

340 Principles of Paleontology (5)

Prereq: 256. (fall) *R. Mapes*. Invertebrate fossils emphasizing their theory of study, morphology, classification, and biologic relationships. 3 lec, 4 lab, field trip.

350 Stratigraphy-Sedimentology (4)

Prereq: 256. (spring) *A. Socci*. Introduction to principles of stratigraphy and sedimentation and generation of stratigraphic record in light of global plate tectonics. 3 lec, 2 lab.

360 Structural Geology (4)

Prereq: 101. (fall) *D. Nance*. Principles of rock deformation and interpretation of folding and faulting and related topics. Field-oriented structural problems, structural maps, and use of stereographic projections. 3 lec, 2 lab, field trip.

407 Geological Applications of Remote Sensing (4)

Prereq: 305, 330, 360, or perm. (winter) *G. Smith*. Principles of interpretation and analysis of conventional aerial photography and satellite imagery in resolution of geologic problems. 2 lec, 4 lab.

413 Optical Mineralogy (5)

Prereq: 315. (fall) *G. Heien*. Optical characteristics of minerals in polarized light; identification of minerals with petrographic microscope. 3 lec, 4 lab.

420 Igneous Petrology/Petrography (3)

Prereq: 413. (winter) *G. Heien*. Petrogenesis of igneous rocks and their description and classification in hand specimen and thin section. 2 lec, 2 lab.

421 Metamorphic Petrology/Petrography (3)

Prereq: 413. (spring) *D. Nance*. Petrogenesis of metamorphic rocks and their description and classification in hand specimen and thin section. 2 lec, 2 lab.

424 Sedimentary Petrology/Petrography (3)

Prereq: 350, 413. (winter) *A. Socci*. Petrogenesis of sedimentary rocks and their description and classification in hand specimen and thin section. 2 lec, 2 lab.

426 Principles of Geochemistry (4)

Prereq: 315, CHEM 142. (spring) *G. Heien*. Low temperature solution geochemistry, and equilibrium (including sea water); Eh-pH relationships; applications of thermodynamics to geologic systems; introduction to isotope geochemistry. 4 lec.

431 Regional Geomorphology of North America (4)

Prereq: 330; 256 recommended. *G. Smith*. General consideration of nature and origin of landforms of North America, emphasizing regional approach to study of landforms. 4 lec.

432 Origin and Classification of Soils (4)

Prereq: 330 or perm. *G. Smith*. Consideration of concept of soil and factors of soil formation; introduction to soil morphology and systems of soil classification; discussion of major soil groups of world and soils of Ohio. 3 lec, 2 lab, field work.

438 Glacial Geology (4)

Prereq: 330 or perm. (spring) *G. Smith*. Formation and behavior of glaciers, past and present; consideration of glacial processes; and causes and implications of ice ages. 3 lec, 2 lab, field trips.

443 Advanced Invertebrate Paleontology (5)

Prereq: 340. (winter) *R. Mapes*. Study of selected groups in Phylum Mollusca with details of modern biology, environmental habitats, life modes, etc. applied to fossil record. 3 lec, 4 lab.

446 Principles of Micropaleontology (4)

Prereq: 256, 350. (fall) *T. Worsley, R. Mapes*. Biology, morphology, taxonomic characteristics, and uses of microscopic fossils. 3 lec, 2 lab.

448 Principles of Paleogeology (4)

Prereq: 340 or perm. (spring) *R. Mapes, T. Worsley*. Principles involved in reconstruction of paleoenvironments. 3 lec, 2 lab.

454 Marine Geology (4)

Prereq: 101, 211. (spring) *T. Worsley*. Basic sedimentological processes and sedimentary facies in marine environments. 4 lec.

461 Advanced Structural Geology (4)

Prereq: 360, PHYS 201 recommended. (winter) *D. Nance*. Stress and strain; their application and derivation in natural structures. Regional structural associations and geometric analysis. 3 lec, 2 lab.

462 Geodynamics: The Earth's Interior (4)

Prereq: 101, 420 recommended, PHYS 201 or perm. (spring) *R. Ramana, D. Nance*. Solid earth geophysics (gravity, magnetism, seismicity, heat flow) and internal structure, dynamics, and evolution of Earth's core, mantle, and crust.

464 Regional Tectonics (4)

Prereq: 360, 462, or perm. (spring) *D. Nance*. Global tectonics and structure of continental cratons and margins, mid-ocean ridges, island arcs, and major orogenic belts. 4 lec.

470 Economic Geology (4)

Prereq: 315. Principles of mineral deposition and characteristics of metallic and nonmetallic mineral deposits.

475 Petroleum Geology (4)

Prereq: 360. (fall) *S. Fisher*. Origin, migration, and accumulation of petroleum and survey of major oil basins of world. 3 lec, 2 lab.

476 Subsurface Methods (4)

Prereq: perm. (winter) *M. Ahmad*. Resume of drilling, sampling, and logging by electric, radioactivity, temperature, neutron meth-

ods as applied to petroleum exploration, water, and engineering projects. 3 lec, 2 lab.

480 Hydrogeology I (4)

Prereq: perm. (fall) *M. Ahmad*. Principles governing occurrence, movement, and recovery of water in soil and aquifers. Hydrologic cycle, water budget, hydrology of agriculture, watershed studies, water chemistry, and pollution. 3 lec, 2 lab.

481 Hydrogeology II (4)

Prereq: perm. (winter) *M. Ahmad*. Steady and unsteady flow to well, analysis of pumping test data, water well design, well development, interference of wells, design of well fields. 3 lec, 2 lab.

482 Theory of Groundwater Motion (4)

Prereq: 481. (spring) *M. Ahmad*. Basic principles and fundamental equations; D.E. of groundwater motion, solution of boundary value problems for different types of aquifer. Analytical and numerical methods in subsurface hydrology with emphasis on finite difference method; digital model. 4 lec.

483 Field Hydrology (6)

Prereq: water resources background. (summer) *M. Ahmad*. Field training in techniques of hydrology and water resources evaluation. 3 wks.

485 Exploration Geophysics (4)

Prereq: 462. (fall) *R. Ramana*. Introductory course in geophysical exploration methods as practiced in petroleum industry. Emphasis on seismic methods especially CDP reflection; gravity and magnetic methods also covered. 3 lec, 2 lab.

487 Summer Field Geology (9)

Prereq: 350, 360, 420, 421, 424. (7 wks, including travel time, and 1 wk report preparation, summer) *Staff*. Geologic mapping in deformed sedimentary, igneous, and metamorphic terranes. Written field report required. Course conducted in central Nevada.

488 Geologic Field Reconnaissance (2 or 3)

Prereq: perm. (winter) Spring vacation period geologic field trips to selected areas in eastern and central U.S. with pertinent conferences, readings, and reports.

490 Seminar in Geology (1-2)

Prereq: perm. Several seminars on specific topics in geological sciences will be offered yrly. It is recommended that all majors participate in at least 1 seminar.

491 Geologic Studies (1-6, max 12)

Prereq: perm. *Staff*. Individual or small group independent study arranged with faculty members.

GERMAN

See Foreign Languages and Literatures.

GERONTOLOGY

Undergraduate Certificate

The colleges of Arts and Sciences and Health and Human Services co-sponsor a Gerontology Certificate Program for students who desire to supplement their undergraduate curriculum for a career in working with or for the elderly. This program is open to any undergraduate student in the University.

Course Requirements

Core Courses

(Required)	Credit Hours
HLTH 413 Health Aspects of Aging	3
PSY 374 Psychology of Adulthood & Aging	4
SOC 334 Sociology of Aging	4
SW 395 Aging in the Welfare State	4

Gerontology Practicum

(Required 5 hrs.)

Credit obtained through existing University practicum/internship course

Electives

(Any eight hrs.)

ECON 493 Readings - Economics of Aging	4
HECF 462F The Aged Family	2
HECF 380 Death & Dying	4
HSS 300 Disorders of Communication in Elderly	3
NBSP 475 Concepts of Nursing XIV (Gerontological Nursing)	5
SW 381 Counseling Older Adults	4
(Note: Mental Health Technology students may substitute MHT 205 & 210 for SW 381)	
SW 391 Social Security System	4
TOTAL	28

Additional experimental aging courses, other age-related courses, and workshops on aging may be used as electives upon prior approval from the Director of the Gerontology Certificate Program.

A Gerontology Certificate is awarded upon graduation from Ohio University and the award is recorded on the permanent record (transcript). Students seeking the certificate must consult with the director prior to the deadline for graduation to ensure that the certificate will be awarded.

For more information on course offerings and practicum course requirements, or to enroll in the program, contact the Director of the Gerontology Certificate Program.

GOVERNMENT

See Political Science.

GREEK

See Foreign Languages and Literatures.

HEALTH AND SPORT SCIENCES

Athletic Training

329 Introduction to Athletic Training (2)

Prereq: ZOOL 301, ZOOL 345, or perm. Treatment and prevention of athletic injuries.

331 Therapeutic Modalities (2)

Prereq: 329. Skills, principles, and knowledge of therapeutic modalities used in rehabilitation of athletic injuries.

420A Advanced Athletic Training I (4)

Prereq: 329. Advanced techniques in prevention, management, and rehabilitation of athletic injuries to upper extremity. Also covers conditioning, nutrition, and emergency field procedures.

420B Advanced Athletic Training II (4)

Prereq: 329. Advanced techniques in prevention, management, and rehabilitation of athletic injuries to lower extremity. Also covers facilities, equipment, and supplies.

421 Athletic Training Practicum (2)

Prereq: 329. Develops athletic training skills through practical experience with concentration on preventive and protective techniques.

Coeducational Activities

These courses are for students wishing to gain competency in an activity. Courses are offered on a credit/fail basis.

- 101 Archery (1)
- 102 Badminton (1)
- 103 Basic Movement (1)
- 104 Yoga (1)
- 105 Boating (1)
- 106 Bowling (1)
- 107 Conditioning and Weight Training (1)
- 108 Curling (1)
- 109 Folk Dance (1)
- 110 Golf (1)
- 111 Intermediate Golf (1)
- 112 Judo (1)
- 113 Karate (1)
- 114 Life Saving (1)
- 115 Horseback Riding (1)
- 116 Beginner Ice Skating (1)
- 117 Figure Ice Skating (1)
- 118 Advanced Figure Ice Skating (1)
- 119 Fencing (1)
- 120 Beginning Swimming (1)
- 121 Intermediate Swimming (1)
- 122 Tennis (1)
- 123 Intermediate Tennis (1)
- 124 Volleyball (1)
- 125 Social Dance (1)
- 126 Scuba (1)
- 127 Water Polo (1)
- 128 Modern Dance (1)
- 129 Belly Dancing (1)
- 130 Tai Chi (1)
- 131 Intermediate Judo (1)
- 132 Intermediate Karate (1)
- 133 Advanced Tennis (1)
- 134 English Riding - Jumping (1)
- 135 Cycling (1)
- 136 Advanced Swimming (1)
- 137 Beginning Diving (1)
- 138 Intermediate Fencing (1)
- 139 Advanced Cycling (1)
- 140 Skiing (1)
- 141 Beginning Water Skiing (1)
- 142 Advanced Water Skiing (1)
- 143 Intermediate Volleyball (1)
- 144 Softball (1)
- 145 Competitive Water Skiing (1)
- 146 Intermediate Yoga (1)
- 147 Intermediate Modern Dance (1)
- 148 Field Sports I: Soccer (1)
- 149 Intermediate Belly Dancing (1)
- 150 Adapted Physical Education (1)
- 151 Ice Dancing (1)

- 152 Intermediate Snow Skiing (1)
- 153 Aerobic Conditioning (1)
- 154 Power Skating (1)
- 155 Intermediate Skating (1)
- 156 Tae Kwon Do (1)
- 157 Advanced Fencing (1)
- 158 Jogging (1)
- 159 Aerobic Dancing (1)
- 160 Basic First Aid (1)
- 161 Physical Conditioning I (1)
- 162 Physical Conditioning II (1)
- 163 Physical Conditioning III (1)

Health Sciences

101 Introduction to Health and Human Services Professions (2)

(fall) Taught by team of faculty and practicing professionals, course examines various roles of health care professionals in health care delivery system, describes education and training program options, and explores opportunities for employment.

202 Personal and Community Health (4) (2S)

Practices and appreciation of means whereby health of individual and group may be maintained.

204 Drugs, Alcohol, and Tobacco (3)

Prereq: 202. Indepth study of contemporary issues — drugs, alcohol, and tobacco—for prospective teacher.

227 First Aid (3)

Principles and practices of American Red Cross first aid. Standard certificate granted if requirements met.

228 Cardiopulmonary Resuscitation (1)

Emergency first aid for respiratory failure and cardiac arrest.

301 Introduction to Health Care Organizations (4)

Prereq: perm. Focuses on U.S. health system, describing health care institutions, providers, payment practices, and significant health legislation. Discusses trends and future perspectives against historical background. Assists manager to develop panoramic view of health care organizations.

302 Managing Long-Term Care I (3)

Prereq: perm. Presents laws, regulations, and standards that impact long-term care facilities management. Discusses client rights and responsibilities and their implications in managing such facilities. Stresses ethical and moral issues confronting manager. Reviews risk management and strategies for providing safe and comfortable environment.

303 Managing Long-Term Care II (3)

Prereq: 302, perm. Presents managerial ideologies important to manager of long-term care facilities. Fully develops role of administrator in planning, organizing, directing, controlling, and staffing for specific services of long-term care facilities within holistic framework for client care. Studies professional relationships and coordinating function of manager. Includes contributions of rehabilitation and recreation services to long-term care.

327 Instructor's First Aid (3)

Prereq: current first aid certificate. As prescribed and certified by American Red Cross.

328 CPR Instructor (2)

Prereq: 228. Prepares instructors to teach emergency first aid for respiratory failure and cardiac arrest in victims of all ages. Enables prospective students, through training, to meet certification requirements for CPR module instructors.

350 Independent Study (1-5)

Study and/or research in selected topics of interest to students in health sciences.

360 Environmental Health and Safety (5)

Prereq: 90 hrs. Basic environmental health and safety concepts, practices, and procedures of practical application in community health agencies.

364 Community Health Field Experience (1-5)

Prereq: jr rank, 370. Observation and participation in activities of community health agency or medical facility. Students must apply for placement during preregistration.

369 Teaching of Health (5)

Prereq: 202; jr rank. Instruction, principles, and curricula used in presenting health information to pupils in elementary and secondary schools.

370 Community Health Problems (4)

Prereq: 202. Institutional frameworks for promoting and maintaining health of people of community, state, and nation.

370J Community Health Problems (4) (1J)

Prereq: jr rank. This course is designed to improve the writing skills of students and provide a foundation for understanding community health problems.

380 Safety Education (4)

Preparation for assuming responsibility for programs of safety education and accident prevention in schools, industry, and public services.

402 Contemporary Problems in Health Care Organizations (4)

Prereq: perm, sr rank. Identifies societal forces which are prescribing new role definitions and new skills for health manager. Explores selected issues confronting modern health care administrator and management strategies effective in resolving these and related problems. Examines research studies underway in health care organizations. 2 lec, 2 lab.

403 Managing Long-Term Care III (3)

Prereq: perm. Deals with administrative processes in long-term care management. Orients student to modern information systems and use of data in managing decision action and record keeping. Presents content on building effective public relations, managing volunteer programs, and in supporting client governance.

413 Health Aspects of Aging (3)

Prereq: 202 or perm. (spring) Theories of aging involving changes in structure and performance presented. Emphasis on normal aging changes, mental health, health promotion, and community health.

419 Health Education for the Elementary School (4)

Prereq: 202 or perm. Application of principles of curriculum development, identification of appropriate concepts and practices, and use of teaching methods and resources at elementary school level.

425 Controlling Stress and Tension (2)

Prereq: 202 or perm. Holistic approach to stress management covering recognition of tension, physiological response, relaxation techniques, and individual stress profile.

430 Worksite Health Promotion (4)

Examination of worksite health promotion programs. Guidelines for development of health promotion programs in corporate settings discussed.

453 Clinical Observation and Practice in Physical Medicine and Rehabilitation (6)

Prereq: ZOOL 301, 345 or equiv. (summer) Concentrated summer school field course at V.A. hospital, Chillicothe. Instruction by hospital corrective therapy staff. Open to sr majors or grad students in physical education.

464 Community Health Services Practicum (15)

Prereq: sr rank. Participation in activities of official or voluntary public health agency. Supervision of experience to be done by agency personnel and University faculty.

480 Practicum in Nursing Home Management: A (15)

Prereq: all coursework completed; perm. Focuses on skill-building experiences in general administration critical to overall management of long-term care facility and its relationship to community.

481 Practicum in Nursing Home Management: B (10)

Prereq: perm. Focuses on comprehensive skill-building experiences in managing client-care programs and services. Develops competencies in applying holistic concept of care to selected

groups of clients. Provides opportunities to work with and through professional health care team in attaining quality client care.

490 Independent Study (1-5)

Prereq: perm. Allows for special study of topics of interest to students studying long-term care management.

491A-F* Workshop on Special Topics for Nursing Home Management (1-3)

Prereq: matriculation in Ohio University, perm. (A) Focuses on administrative practices and issues; (B) focuses on environmental health and safety; (C) focuses on legal aspects; (D) focuses on client-centered care programs; (E) focuses on team-building and interpersonal relationship skills; (F) focuses on intercommunity relationships and consortia arrangements.

495 School Health Problems (5)

Prereq: 369 and sr rank. Principles, problems, organization, and administration of school health programs, including health services, healthful school environment, health instruction, and school and community relationships.

Men's Activities

These courses are for students wishing to gain competency in an activity. Courses are offered on a credit/fail basis.

101 Basketball (1)

102 Conditioning and Weight Training (1)

103 Crosseball (1)

104 Gymnastics (1)

105 Handball (1)

106 Squash (1)

107 Swimming (1)

108 Intermediate Swimming (1)

109 Ice Hockey Fundamentals (1)

110 Lacrosse (1)

111 Softball (1)

112 Racquetball

113 Intermediate Handball (1)

114 Team Handball (1)

115 Intermediate Racquetball

Physical Education and Sport Sciences

103 Swimming I (2)

Basic swimming skills for nonswimmers and beginners.

104 Swimming II (2)

Prereq: 103 or students with deep-water swimming skills. Instruction in basic strokes and related aquatic skills at intermediate and advanced level.

105 Conditioning for Activity and Organic Efficiency (2)

Prereq: physical education major. To increase fitness level and knowledge competency of students majoring in physical education.

106 Introduction to Human Movement (2)

Prereq: physical education major. Introduces student to discipline of human movement and to profession of teaching within discipline. Students begin to develop movement analysis techniques, and learn fundamental of self and other analyses in movement.

107 Modern Dance I (2)

Prereq: physical education major or minor or perm. Basic principles of dance technique. Movement progressions involving relationships of time, space, and dynamics.

108 Modern Dance II (2)

Prereq: 107 or equiv. Complex movement progressions, and experimentation in composition.

109 Synchronized Swimming (2)

Prereq: 104 or equiv. Focuses on basic principles of 104. Development of simple stunts, sculling, and modified strokes; experimentation in group and individual composition.

115 Rhythmics (2)

Prereq: physical education major or minor or perm. Practical approach to rhythm fundamentals through various dance forms.

116 Social Forms of Dance (2)

Prereq: 115 or perm. Intermediate skills in ballroom, folk, round, mixers, couple, and contra dance.

117 Folk and Square Dance (2)

Prereq: physical education major. Introduces folk and square dance skills, and allows students majoring in physical education to develop competency in this area of dance.

134 Introductory Field Experience in Physical Education (2)

Designed to assist in career decisions. Seminar component prepares for field experience and practicum component aids in career decisionmaking.

141A Archery (1)

Prereq: physical education major or perm. Increases archery skill and knowledge competency of students majoring in physical education.

141B Golf (1)

Prereq: physical education major or perm. Increases golf skill and knowledge competency of students majoring in physical education.

212 Introduction to Coaching (3)

Prereq: soph. Introduction to high school interscholastic athletics including history, structures, job opportunity, and contemporary programs.

213 Youth and Sports (3)

Covers opportunities, controversies, organizations, safety, values, rules, leadership, benefits, and settings of youth sports programs.

215 Practicum in Athletics (2)

Prereq: 212 or perm. Supervised field experience designed to involve student in coaching/administrative setting.

218 Life Saving and Water Safety (2)

Prereq: 104 or equiv or perm. Principles and practices of life saving for American Red Cross certification.

220 Water Safety for Instructors (3)

Prereq: current Red Cross Life Saving certificate. For those who hold valid American Red Cross Life Saving certificate. Includes analysis of swimming, life saving techniques, and teaching practices.

221A Tennis (1)

Prereq: physical education major or perm. Increases tennis skill and knowledge competency of students majoring in physical education.

221B Badminton (1)

Prereq: physical education major or perm. Increases badminton skill and knowledge competency of students majoring in physical education.

222 Tumbling and Modern Gymnastics (2)

Prereq: physical education major or minor or perm. Stunts, tumbling, and modern gymnastics.

223 Track and Field (2)

Prereq: physical education major or minor or perm. Track and field activities.

224A Racquetball (1)

Prereq: physical education major or perm. Increases racquetball skill and knowledge competency of students majoring in physical education.

224B Wrestling (1)

Prereq: physical education major or perm. Familiarizes physical education major with skills and knowledge necessary for successful teaching of wrestling. Adding this course as elective to physical education curriculum will widen their scope and better prepare physical educators in teaching field.

225 Gymnastics—Men & Women (2)

Prereq: 222 or perm. Women: floor exercise, balance beam, vaulting, and uneven parallel bars; men: horizontal bars, giant swing, floor exercise, and vaulting.

226 Elementary School Physical Education Workshop (2)

Theory, teaching methods, techniques, and materials in elementary school physical education, with emphasis on appropriate rhythmical, individual, and group activities.

234 Clinical and Field-based Experiences in Physical Education (1-4)

Prereq: soph rank; 134, 273 or 274, or one theory and practice course. Supervised practice in organizing, managing and teaching physical education activities to public-school-age children in public school and clinical settings. May be repeated in excess of 4 hrs credit with approval.

260A Flag Football (1)

Prereq: physical education major or perm. Increases flag football competency of students majoring in physical education.

260B Team Handball (1)

Prereq: physical education major or perm. Increases team handball competency of students majoring in physical education.

261 Introduction to Physical Education (1)

Lab and field experiences designed to place students in various settings related to their program emphasis.

262A Field Hockey (1)

Prereq: physical education major or perm. Focuses on producing performance competency in skills, with knowledge of rules of activities involved and with ability to apply strategies in games. Team play valued as cooperative project.

262B Soccer (1)

Prereq: physical education major or perm. Focuses on producing performance competency in skills, with knowledge of rules of activities involved and with ability to apply strategies in games. Team play valued as cooperative project.

263A Basketball (1)

Prereq: physical education major or perm. Increases basketball skill and knowledge competency of students majoring in physical education.

263B Volleyball (1)

Prereq: physical education major or perm. Increases volleyball skill and knowledge competency of students majoring in physical education.

264A Softball (1)

Prereq: physical education major or perm. Focuses on developing student competency in softball skills, with understanding of strategy in activities and knowledge of official rules and their application.

264B Lacrosse (1)

Prereq: physical education major or perm. Develops student competency in lacrosse with understanding of strategy in activities and knowledge of official rules and their application.

265 Diving and Competitive Swimming (2)

Prereq: 104 or equiv. Familiarizes student with mechanics and performance skills of competitive swimming and diving. Adding this course as elective to aquatics specialization will widen scope and better prepare physical educators with aquatics interest.

268 Gymnastics for Men (2)

Prereq: jr rank. Teaching methods, techniques, materials, theory, and practice in stunts and tumbling, apparatus, demonstrations and exhibitions, marching, and conditioning activities.

270 Teaching of Physical Education (3)

Lab and lecture experiences for teaching physical education in elementary school. Designed for elementary education students.

273 Movement Education and Fundamental Skills (3)

Theory, teaching methods, techniques, and materials in elementary school physical education with emphasis on basic movement education for levels K-3.

274 Sport and Game Skills for Elementary School Children (3)

Theory, techniques, and materials for elementary school physical education program with emphasis on lead-up activities, creative game analysis, and sport and recreational skills for levels 4-6.

275 Elementary School Rhythms and Dance (3)

Rhythmics and dance activities for elementary level, involving movement exploration, creative dance, and traditional dance.

280 Teaching Adapted Physical Education: Analysis and Description

Prereq: soph rank. Methods and materials of teaching-learning process for physical education classroom.

302 Kinesiology (4)

Prereq: ZOOL 301. Analysis of human movement based on anatomical and mechanical principles.

305 Coaching of Swimming (2)

Prereq: 212 or perm. Theory of coaching swimming and diving: analysis of skills, methods, duties, and responsibilities.

314 Coaching Sports for the Disabled (2)

Prereq: jr rank and perm. Examines scope of coaching techniques, training programs, and principles of competitive sports for disabled people.

318 Coaching of Tennis (3)

Prereq: 212 or perm. Theory of coaching tennis: analysis of skills, strategies, methods, duties, and responsibilities. Limited practical work.

319 Analysis of Current Research in Physical and Motor Development of Athletes (3)

Prereq: 212 or perm. Physiological, anatomical, and kinesiological research finding which maximizes motor performance and minimizes injury. Special emphasis on utilization of research in competitive sports.

320 Coaching of Wrestling (3)

Prereq: 212 or perm. Theory of coaching wrestling: analysis of skills, strategies, methods, duties, and responsibilities.

322 Games, Rhythms, and Gymnastics for Elementary School Children (3)

Prereq: secondary specialization. Overview of theory, teaching methods, and materials for elementary school physical education for grades K-8. Designed to emphasize similarities and differences of teaching physical education at secondary and elementary level for secondary specialization student.

324 Coaching of Soccer (3)

Prereq: 212 or perm. Theory of coaching soccer: analysis of skills, strategies, methods, duties, and responsibilities.

325 Human Dynamics in Coaching (3)

Prereq: 212 or perm. Interpersonal dimensions of coaching and participating in interscholastic athletic program.

333 Theory of Adapted Activities (3)

Prereq: ZOOL 301. Organization of physical activity programs adapted to needs of atypical individuals.

334 Clinical and Field-based Experiences in Physical Education (1-4)

Prereq: jr rank; 134, 273 or 274, or one theory and practice course. Supervised practice in organizing, managing, and teaching physical education activities to public-school-age children in public school and clinical settings. May be repeated in excess of 4 hrs credit with approval.

337 Dance Composition (2)

Prereq: 108 or equiv. Basic principles of composition, presentation, and choreography.

339 Athletic Officiating — Football (3)

(fall only) Rules, mechanics, and procedures in officiating. Practice under actual game conditions in Intramural Sports Program.

340 Athletic Officiating — Basketball (3)

(winter only) Rules, mechanics, and procedures in officiating. Practice under actual game conditions in Intramural Sports Program.

341 Athletic Officiating — Baseball (3)

(spring only) Rules, mechanics, and procedures in umpiring. Practice under actual game conditions in Intramural Sports Program.

342 Sports Officiating III (1)

(spring) U.S.W.L.A. rules and procedures in officiating lacrosse; or USFHA and Federation rules and procedures in officiating field hockey. Fee required for those taking local, state, or national rating examination.

350 Independent Study (1-5)

Prereq: perm. Study and/or research in selected fields related to health, physical education, athletics, intramurals, or recreation under direction of HPES undergraduate committee and faculty member.

351 Coaching of Golf (2)

Prereq: 212 or perm. Theory of coaching golf: analysis of skills, methods, duties, and responsibilities.

352 Coaching of Ice Hockey (3)

Prereq: 212 or perm. Theory of coaching ice hockey: analysis of skills, strategies, methods, duties, and responsibilities.

353 Coaching of Lacrosse (3)

Prereq: 212 or perm. Theory of coaching men's and women's lacrosse: analysis of skills, strategies, methods, duties, and responsibilities.

354 Coaching of Volleyball (3)

Prereq: 212 or perm. Theory of coaching volleyball: analysis of skills, strategies, methods, duties, and responsibilities.

356 Coaching of Field Hockey (3)

Prereq: 212 or perm. Theory of coaching field hockey: analysis of skills, strategies, methods, duties, and responsibilities.

365 Coaching of Basketball (3)

Prereq: 212 or perm. Theory of coaching basketball: analysis of skills, strategies, methods, duties, and responsibilities.

366 Coaching of Baseball/Softball (3)

Prereq: 212 or perm. Theory of coaching baseball: analysis of skills, strategies, methods, duties, and responsibilities.

367 Coaching of Football (3)

Prereq: 212 or perm. Theory of coaching football: analysis of skills, strategies, methods, duties, and responsibilities.

368 Coaching of Track (3)

Prereq: 212 or perm. Theory of coaching track: analysis of skills, strategies, methods, duties, and responsibilities.

372 Theory and Practice of Sports (3)

Prereq: 4-6 hrs of skill classes in individual and/or team sports. Analysis and teaching progression of individual sport skills. Organizational techniques and practices. Lesson and unit planning.

373 Theory and Practice of Aquatics (3)

Prereq: 104, and 218 (or 220). Analysis and teaching progression of aquatic skills and related activities. Organizational techniques and practices. Lesson and unit planning.

374 Theory and Practice in Rhythmic Activities (3)

Prereq: 107 or 108, 115 and 116, intermediate modern dance skill recommended. Teaching progression and materials for rhythmic programs on secondary level. Lesson and unit planning.

375 Theory and Practice of Women's Gymnastics (3)

Prereq: 222 and 225. Materials, techniques, and practice of artistic and rhythmic gymnastics. Lesson and unit planning.

377 Theory and Practice of Elementary Physical Education

Prereq: 273, 274, 275. Study of scope and sequence of elementary physical education program (K-8), development of understanding for interrelationship of curriculum, unit, and lesson planning, and refinement of teaching skills unique to teaching elementary physical education.

400 Women in Sports (3) (2S)

Examines role of play, sports, and games in life of women. Explores place of women in sports world, and reflects on special attitudes and structure of women's sports.

402 Learning Strategies in Physical Education (3)

Prereq: 2 theory and practice courses. Discussion and application of selected methods and techniques used in teaching of physical education.

404 History and Principles of Physical Education (4)

Prereq: jr or sr rank. History of sport and physical education from ancient to modern times. Principles underlying physical education in modern program of education.

405 Motor Learning (4)

Prereq: PSY 275, ZOOL 345. Consideration of psychological, sociological, and physiological bases of learning and application of these theories to performance.

406 Organization and Administration of Physical Education (4)

Prereq: jr or sr rank. Organization and administration of physical education, intramural, and athletic programs in elementary and secondary schools.

408 The Black Athlete and American Sport (3)

Explores origins of black athlete's participation in American sport and examines role of black men and women in growth of American sport and physical activity during 19th and 20th centuries.

409 Tests and Measurements (4)

Prereq: jr or sr rank. Administration and evaluation of tests in health, physical education, and athletics; practice in handling test data by elementary statistical methods.

411 The Olympic Movement (3)

Study of origin and development of games from Greek era to modern period. Meaning of Olympism in relation to contemporary summer and winter Olympiads explored.

412 Administration of Sports (3)

Prereq: 212 or perm. Focuses upon legal questions, public relations, ethics, budgeting, recruiting, crowd control, evaluation, and personnel.

414 Physiology of Exercise (4)

Prereq: ZOOL 345 or equiv. Fundamental concepts describing reaction of organ systems to exercise; study of work produced by muscle; special areas include sport conditioning, muscular fatigue, physiology and nutrition in exercise, weight control and exercise; physical fitness; exercise and environmental stresses; review of recent research in exercise physiology and human performance.

415 Physiology Exercise Lab (2)**434 Clinical and Field-based Experiences in Physical Education (1-4)**

Prereq: sr rank; 134, 273 or 274, or 1 theory and practice course. Supervised practice in organizing, managing, and teaching physical education activities to public-school-age children in public school and clinical settings. May be repeated in excess of 4 hrs credit with approval.

485 Perceptual Motor Development in Children (3)

Prereq: 106 and 405. Principles and practices in perceptual-motor development as they relate to children's movement experiences.

Recreation Studies

101 Orienteering (1)**102 Advanced Orienteering (1)****103 Survival I (1)****104 Survival II (1)****105 Whitewater Rafting (1)****106 Hunting (1)****107 Trapshooting (1)****108 Rapelling (1)****109 Advanced Survival (1)****111 Cross Country Skiing (1)****112 Backpacking (1)****113 Canoeing (1)****114 Kayaking (1)****115 Ropes (1)****116 Rescue Techniques (1)****117 Primitive Construction (1)****199 Introduction to Therapeutic Recreation Services (2)**

Factors presented will serve as foundation for career or employ-

ment in therapeutic services in both public and private settings for disabled, delinquent, and disadvantaged.

200 Introduction to Leisure (2)

Provides student with broad understanding of nature and scope of leisure behavior and resources on which they can build their subsequent specializations.

214 Camping for Special Populations (2)

Prereq: 120. Develops and teaches implementation of camping activities for special populations with emphasis on strengths and weaknesses of individual camper.

236 Field Experience in Recreation (1-3)

Prereq: soph rank and 250. Designed to provide soph recreation student with opportunity to acquire supervised experiences in skills and techniques involved in differing areas of recreation.

240 Taxidermy I (2)

Prereq: soph rank. Study and practice of methods used to produce specimens that are exact replicas of living animals. Emphasis on birds.

241 Taxidermy II (2)

Prereq: 240. Continuation of 240, with major emphasis on game animals and fish.

250 Recreation Leadership (3)

Prereq: recreation major and/or minor or perm. Lectures and discussions concerning value of recreation, leadership techniques, and selection of activities.

251 Art and Nature Crafts for Recreational Programs (3)

Prereq: recreation major/minor or perm. Organization of art and nature crafts program and actual experiences in use of various craft materials with particular emphasis on nature crafts.

290 The Art of Sport Officiating (3)

Provides meaningful, educational experience of practical nature in area of sport officiating.

291 Outdoor Pursuits (3)

Provides student with basic skills and knowledges to teach selected outdoor activities.

310 Program Planning and Facilities for Recreation (5)

Prereq: recreation major/minor or perm. Concepts and fundamentals of recreation programs, program planning and care, selection, and design of recreation facilities.

311 Expedition Management (3)

Will assist student in planning and competently leading wilderness camping expedition. Will acquaint student with all aspects of expedition leadership. Student will develop and lead expedition in competent, safe manner.

314 Camping (4)

Prereq: recreation major/minor or perm. Introduction to and experiences in different methods of camping and various skills associated with camping.

315 Outdoor Education and Recreation (4)

Prereq: recreation major/minor or perm. Designed to provide student with fundamental knowledges necessary to provide learning experiences in out-of-doors and for teaching necessary skills for outdoor living enjoyment.

336 Field Experiences in Recreation (3)

Prereq: jr rank and/or perm. Designed to provide jr recreation student with opportunity to acquire experience in skills and techniques involved in differing areas of recreation.

345 Camp Leadership (2)

Responsibilities of camp personnel at executive, administrative, supervisory, and functional levels. Includes different types of organized camps and their individual programs.

376 Principles and Practices of Therapeutic Recreation (3)

Prereq: recreation major/minor or perm. Study of therapeutic recreation service, principles, and practices in various types of institutions.

379 Recreational Activities for Special Populations (3)

Assessment and analysis of leisure time activities for handicapped with emphasis on contributions these activities can make in rehabilitation of those special populations.

381 Administration of Intramural Sports (4)

Organizing and administering a program of intramural sports for all age levels.

390 Wilderness Survival (3)

Provides student with basic skills and knowledges to survive in wilderness situation, to cope with wilderness emergencies, and to teach wilderness survival.

403 History of Recreation (3)

Prereq: recreation major/minor or perm. Study of historical development of recreation from early worlds to present. Emphasis on contribution of recreation and its effect on humans throughout history and its impact and implication for humankind's use of leisure time in present-day society.

433 Recreation for the Mentally Retarded (3)

Prereq: perm. Preparation for presenting activities and evaluating mentally retarded and learning disabled children and youth in areas of body mechanics, physical fitness, games of low organization, sports, rhythms, stunts, tumbling, and recreation activities.

440 Internship in Recreation (16)

Prereq: recreation major and perm. Supervised professional field work experiences in approved program of recreation.

449 Administration of Recreation (4)

Prereq: sr rank. Programs and program building; administration of playgrounds, community centers, and recreational activities.

460 Understanding Play (3)

Study of selected play theory for purpose of developing recreation therapy programs.

470 Program Planning for the Handicapped and Confined (3)

Prereq: 120 or EDSP 271. Designed to prepare students to assess handicapping conditions; to determine consequences of these conditions; and to direct and plan therapeutic activities which contribute to disabled person's maximum recreational functioning.

475 Adventure Programming (3)

Prepares student to plan, organize, and conduct outdoor adventure activities.

Women's Activities

These courses are for students wishing to gain competency in an activity. Courses are offered on a credit/fail basis.

101 Archery (1)**102 Badminton (1)****103 Basic Movement (1)****104 Basketball (1)****105 Conditioning and Weight Training (1)****106 Gymnastics (1)****107 Squash (1)****108 Swimming (1)****109 Intermediate Swimming (1)****110 Lacrosse (1)****111 Softball (1)****112 Racquetball (1)**

HEARING AND SPEECH SCIENCES

The curriculum in hearing and speech sciences is designed to give the student a basic understanding of the causes and treatment of various speech, language, and hearing disorders. A student wishing to pursue certification as a speech therapist in

Ohio's schools takes additional coursework in education but completion of that certificate cannot occur at the undergraduate level. Students must be admitted to graduate school to complete all requirements for Ohio certification, including student teaching.

107 Voice and Articulation (2)

Designed to help each student recognize, evaluate, and compensate for or improve speech production characteristics.

108 Introduction to Speech Disorders (5) (2A)

Symptoms, causes, effects, and evaluation of disorders of speech, voice, and language.

207 English Pronunciation - International Students (2)

Prereq: successful completion of OPIE or comparable proficiency in English. Group and individual instruction and pronunciation of sounds, rhythm, and stress patterns of English for international students and nonnative speakers of English.

209 Phonetics (4) (2A)

(fall) Speech sounds from sociological and physiological point of view. Mastery of International Phonetic Alphabet and English phonetic transcription.

210 Language Development (5)

Prereq: 209. (fall) Provides foundation in normal speech and language development. Development of meaning, symbolic representation, morphology, and syntax.

213 Anatomy (4)

(winter) Structures, musculature, and functions involved in respiration, phonation, resonance, and articulation for speech.

240 Practicum (2)

Prereq: HSS majors only. Introduction to therapy training through lectures and video tapes of diagnosis, therapy, and various areas of profession. 2 class meetings per wk. Qtr taken determines subsequent practicum sequence.

250 Speech Science (4)

(winter) Physical properties of speech signals. Analysis of speech and speech perception. Lab exercises and experiments included.

270 Basic Audiology (4)

Prereq: 250. (spring) Anatomy and neurology of audition. Measurement of hearing with pure tone techniques and interpretation of results of such measurements in terms of social and educational handicap.

300 Communication Disorders of the Elderly: Assessment and Rehabilitation (3)

(spring) Basic information concerning nature of minor and major communication disorders in older adults, communication aids, and alternate approaches to rehabilitation.

315 Stuttering (3)

Prereq: HSS majors only; 9 hrs psychology. (fall) Consideration of causes, types, and effects of stuttering. Evaluation of stuttering. Practical consideration of therapy for stutterers, with emphasis on children's problems.

318 Articulation Disorders (5)

Prereq: HSS majors only; 209, 210. (fall) Phonetic acquisition, articulation evaluation. Emphasis on practical approaches to therapy for individuals with articulation disorders.

319 Voice and Resonance (3)

Prereq: HSS majors only; 213. (spring) Consideration of types and causes of functional and organic voice and resonance problems. Evaluation of phonatory problems. Emphasis on practical approaches used in public school therapy.

322 Diagnostics (4)

Prereq: 12 hrs speech pathology, 9 hrs psychology. (spring) Types of diagnosis in evaluation of speech and language problems. Screening tests; use of statistics in testing; basic interview and history procedures.

336 Speech and Hearing Disorders in the Public Schools (3)

Nature, causes, and treatment of defective speech in public schools with special reference to role of classroom teacher. Not open to HSS majors.

341 Practicum (3)

Prereq: 240, passing speech proficiency and phonetic proficiency tests. Diagnosis, planning of therapy, therapy experience in clinical facility. 2 class meetings per wk plus clinic assignment.

344 Disorders of Language (4)

Prereq: 210, 318. (winter) Introduction to study of disorders of language in children. Diagnosis of problems, assessment of language abilities. Methodologies and techniques in perceptual, psychomotor, and language and speech training.

345 Social Dialects (3)

Prereq: 209, 210, 318. (spring) Introduction to study of social dialects. Problems and controversies surrounding various issues of speakers of social dialects. Training in recognition of dialectal variations and in teaching standard English to speakers of other dialects.

378 Sign Language (3)

Prereq: not open to HSS majors. (fall, summer) Instruction in manual sign language system used by deaf. Vocabulary, encoding, and decoding signs for purpose of communication emphasized.

413 Communication Acoustics (3)

Provides telecommunications majors and other interested students with background materials in acoustics as related to human speech production and perception.

424 Neuropathology (4)

Prereq: 213. (winter, spring) Anatomy and physiology of central, peripheral, and autonomic nervous systems. Types, causes, and syndromes of more significant pathologies of speech and language. Particular attention paid to neurological disorders.

433 Professional Training Seminar (3)

Prereq: sr rank, perm. Seminar in concepts underlying therapy procedures.

442 Practicum (3)

Prereq: 341, grade of C or better in 318 and 344. Diagnosis, planning of therapy, therapy experience in clinic facility. 1 class meeting per wk plus clinic assignment.

442C Clinical Internship (3-15)

Prereq: approval of clinic director. Placement in clinic setting for 1 qtr. Application of diagnosis, therapy planning, and therapy techniques. Must have been applied for fall qtr of jr yr and approved for internship. Apply in writing to HSS undergraduate coordinator.

471 Auditory Rehabilitation (5)

Prereq: 270. (fall, winter) Differential diagnosis of children with suspected auditory disorders. Basic remedial procedures employed with hearing handicapped. Practice in planning lessons in speech reading and auditory training.

479 Basic Manual Communication (3)

Prereq: HSS major or perm. (fall, winter) Basic instruction and practice in fingerspelling and signing used by and for deaf and hard of hearing.

498 Special Problems (1-15)

Prereq: written proposal and perm in qtr prior to registration. Not open to grad students.

499 Independent Reading in Speech Pathology, Audiology, and Speech Science (1-15)

Prereq: written proposal and perm in qtr prior to registration. Not open to grad students.

HISTORY

The major requirement for the A.B. degree consists of a minimum of 52 hours. Unless excused as a result of taking a placement test, this total includes eight hours from the 101-123 sequences; HIST 131; and eight hours from the 211-213 sequence. Also required are 32 hours at the 300-400 level, including HIST 301J, two courses in United States history, two courses in European history, two courses from the following fields: ancient, Africa, Asia, Latin America, Canada, and the Middle East. The 100 level should be taken during the freshman year and the 200 level during the sophomore year. Unless otherwise stated, the prerequisite for 300-level courses is sophomore standing or above and the prerequisite for 400-level courses is junior or senior standing. Courses in economics, geography, political science, statistics, and sociology and anthropology are suggested as electives. Completion of these

requirements fulfills the Arts and Sciences College requirements of at least nine hours in the major at the junior-senior level.

A minor in history consists of a minimum of 28 hours, including at least eight hours at the 100-200 level and at least 16 hours at the 300-400 level. A student pursuing a history minor will plan an academically cohesive program in consultation with a history faculty advisor.

101 Western Civilization in Modern Times (4) (2S)

Renaissance to 1648: Renaissance, Reformation, origins of national state system, diplomacy, and imperialism as applied to Portugal, Spain, and Hapsburg Empire, and commercial and scientific revolutions. When possible, majors should take 101-102-103 in sequence. Nonmajors may elect 102 without taking 101; they may elect 103 without taking 101 or 102.

102 Western Civilization in Modern Times (4) (2S)

Continuation of 101. Covers 1648 to 1848: absolutism, constitutionalism, operation of coalition diplomacy, and imperialism as applied to France and Britain; westernization of eastern Europe, enlightenment, French Revolution, agricultural, commercial, and industrial revolutions and growth of ideologies — liberalism, socialism, and nationalism. When possible, majors should take 101-102-103 in sequence. Nonmajors may elect 102 without taking 101; or 103 without taking 101 or 102.

103 Western Civilization in Modern Times (4) (2S)

Continuation of 101-102. Covers 1848 to present: continued industrial revolution and spread of liberalism, socialism, and nationalism; rise and fall of German bid for power in 2 world wars; new ideologies of materialism, positivism, Social Darwinism, irrationalism, totalitarianism; Russian and Chinese revolutions and international communism; rise and fall of western empires in Africa and Asia. When possible, majors should take 101-102-103 in sequence. Nonmajors may elect 102 without taking 101; they may elect 103 without taking 101 or 102.

121 Western Heritage: Classical Age (4) (2H)

Account of origins of western heritage from ancient Near East to end of Classical Age. Included are such topics as ancient religions, philosophies, literature, and visual arts with particular emphasis on Greece and Rome.

122 Western Heritage: Medieval Legacy (4) (2H)

Discussion of period from decline of Roman Empire to beginning of Renaissance focusing on development of Judaeo-Christian traditions, concept of civilization, and emergent individualism. Important subtopics include growth of universities, chivalry, scholasticism, and humanism.

123 Western Heritage: Modernity (4) (2H)

Major intellectual currents and cultural results from time of Renaissance to present examined in humanistic perspective. Included are such topics as origins of modern philosophy, languages, revolutions, political ideologies, and cultural pluralism.

131 Introduction to Third World History (4) (2T)

Introduces modern history of non-western world (Africa, Asia, Middle East, and Latin America) by focusing selectively on significant encounters with West.

211 American History to 1828 (4) (2S)

Political, diplomatic, social, and economic development of American history. Covers 1607 to 1828: colonial America, founding of new nation, and early national period. When possible, majors should take 211-212-213 in sequence. Nonmajors may elect 212 without taking 211; they may elect 213 without taking 211 or 212.

212 History of the United States, 1828-1900 (4) (2S)

Continuation of 211. Political, diplomatic, social, and economic development of American history. Covers 1828 to 1900: Jacksonian democracy, territorial expansion, sectionalism and controversy, Civil War, reconstruction, and impact of expanded Industrial Revolution. When possible, majors should take 211-212-213 in sequence. Nonmajors may elect 212 without taking 211; they may elect 213 without taking 211 or 212.

213 History of the United States Since 1900 (4) (2S)

Continuation of 211-212. Political, diplomatic, social, and economic development of American history. Covers 1900 to present: progressive movement, WW I, prosperity and depression, WW II, and problems of cold war era. When possible, majors should take 211-212-213 in sequence. Nonmajors may elect 212 without taking 211; they may elect 213 without taking 211 or 212.

- 241 Issues in Modern African History (4) (2T)**
Introduces modern history of Africa by examining 6 basic issues of contemporary importance in historical perspective.
- 242 Issues in Modern Asian History (4) (2T)**
Introduces modern history of Asia by examining 6 basic issues of contemporary importance in historical perspective.
- 243 Issues in Modern Latin American History (4) (2T)**
Introduces modern history of Latin America by examining 6 basic issues of contemporary importance in historical perspective.
- 244 Issues in Modern Middle Eastern History (4) (2T)**
Introduces modern history of Middle East by examining 6 basic issues of contemporary importance in historical perspective.
- 265A Hitler and His Nazis (4) (2S)**
R. Whealey. Rise of Hitler to 1933; Hitler takeover; totalitarianization of Germany; Nazi foreign policy; WW II; Hitler's war on Jews; Hitler's fall; meaning of Fascism.
- 297T Honors Tutorial Seminar, U.S. History (3-5)**
Prereq: admission to Honors Tutorial College. (fall) Covers U.S. history, 1607 to present.
- 298T Honors Tutorial Study, U.S. History (1-5)**
Prereq: 297T. (winter) Independent study, U.S. history.
- 299T Honors Tutorial Study, U.S. History (1-5)**
Prereq: 298T. (spring) Independent study, U.S. history.
- 300A Colonial America to 1689 (4) (2S)**
B. Steiner. English background, establishment of settlements, first economies, evolution of political and religious structures, relations with England, internal conflicts, Glorious Revolution.
- 300B Colonial America, 1689-1763 (4) (2S)**
B. Steiner. Governmental changes, credit and currency, Great Awakening, cultural developments, old colonial system, Anglo-French rivalry, nature of colonial society, problems of maturing political units.
- 300C Revolutionary Era, 1763-1789 (4) (2S)**
B. Steiner. Causes of American Revolution and struggle for independence. Confederation, movement for new government, framing of Constitution.
- 301J Historical Research and Writing (4) (1J)**
Prereq: jr rank. *D. Baxter.* Deals with techniques and mechanics of historical research and writing. After introduction to use of primary and secondary sources and use of history reference material, students will be guided through steps of research and writing: compiling bibliography, analysis of sources, organization of evidence, and style and composition of written paper. Open not only to history majors, but, with perm of instructor, to those of other disciplines interested in history as research tool.
- 302 American Indians (4) (2S)**
R. Daniel. Treats Indian society before white contact; Spanish, French, and English impact; Indian removal; Indian wars; problems of cultural contact; preservation versus assimilation; Indian society today.
- 303 United States in World War II (4) (2S)**
G. Lobdell. Military and diplomatic role of U.S. in WW II; political, economic, and social impact of war on that nation.
- 304 Founding the American Republic: 1789-1815 (4)**
Shaping America's political, social, and economic institutions, constitutional development and foreign policy from Federalists (Washington and Adams) through Jeffersonians.
- 305 The United States and the Vietnam War (4) (2S)**
Examination of American experience in Vietnam, both in terms of military and diplomatic history of war itself, and its impact on American society.
- 308A Sectional Controversy: 1815-1850 (4) (2S)**
P. Field. Conflicts of aristocratic and democratic (Jacksonian) elements in American society and politics; problems arising from slavery, westward expansion, industrial growth, immigration, and reform movements.
- 308B The Civil War and Reconstruction (4) (2S)**
P. Field. Forces making for increased sectionalism in 1850s; rise of new parties; military engagements; society and institutions in

North and Confederacy during wartime; attempts to restructure Southern society after war and why they failed.

- 308C Foundations of Modern America: The Gilded Age, 1877-1901 (4) (2S)**
P. Field. Labor unrest, nativism and anti-semitism, imperialism, government corruption, Social Darwinism, urban growth, Victorian morality, and Indian wars examined as outgrowths of efforts of American people to adapt to modernization and industrialization in late 19th century.
- 310A The United States in Recent Times, 1900-1920 (4) (2S)**
A. Hamby, G. Lobdell. Progressive era, American imperialism, WW I, rejection of Wilsonian liberalism.
- 310B The United States in Recent Times, 1920-1939 (4) (2S)**
A. Hamby, G. Lobdell. Temper and culture of 20s, Republican ascendancy and Democratic revival, Great Depression, F.D. Roosevelt and New Deal.
- 310C The United States in Recent Times, Since 1939 (4) (2S)**
A. Hamby. Abandonment of isolation, WW II, American politics in later Roosevelt years, Cold War, Truman and Fair Deal, politics and problems of 50s and 60s.
- 312 History of the Industrial Revolution in the United States, 1850-1917 (4) (2S)**
Origins of factory system, impact of Civil War, rise of heavy industry, problems of financing and control, influence of progressive era.
- 313 Jews in American History (4) (2S)**
M. Fletcher. Examines political, economic, and religious interaction between Jews and American society. Includes Sephardic and Ashkenazic immigrants, growth of Reform and Conservative Judaism, Zionism, and modern problems of American Jews. From 1654 to present.
- 314 Women in American History (4) (2S)**
R. Daniel. Changing view American society has taken of role women *should* play and role women *did* play. Changing opportunities for women in education and careers. Changing legal status and political rights. Women rebels and reformers.
- 314A Social and Cultural History of the United States, 1607-1820 (4)**
R. Daniel. Role of minorities, class structure, and religion in forming American society; development of American painting, architecture, music, literature, education, and science as expressions of Puritanism, enlightenment, and nationalism.
- 314B Social and Cultural History of the United States, 1820-1890 (4)**
R. Daniel. Role of minorities, class structure, and religion in forming American society; development of American painting, architecture, music, literature, education, and science as expressions of romanticism, Social Darwinism, and pragmatism.
- 314C Social and Cultural History of the United States, 1890 to Date (4)**
R. Daniel. Role of minorities, class structure, and religion in forming American society; development of American painting, architecture, music, literature, education, and science as expressions of pragmatism and existentialism.
- 314D American Social Thought to 1815 (4) (2H)**
C. Alexander. Major aspects of intellectual history of American colonies and U.S. to 1815, organized around 2 major themes: Puritanism, and secularization of American thought in 18th century.
- 314E American Social Thought, 1815-1890 (4) (2H)**
C. Alexander. Major aspects of intellectual history of U.S., 1815-1890, stressing rise of romantic nationalism; triumph of democratic attitude; slavery controversy; impact of Civil War and Darwinian evolution.
- 314F American Social Thought, 1890 to the Present (4) (2H)**
C. Alexander. Major aspects of intellectual history of U.S. since 1890, with principal attention to continuing impact of evolutionary naturalism, especially in development of pragmatism; trends in liberal and conservative political ideologies; rise of pessimistic

theology and its ramifications; modernism in arts; New Radicalism and Counter Culture.

315A History of Black People in America to 1865 (4) (2S)

M. Fletcher. Beginning with introduction of slavery in 1619, course deals with black person's role in America through Civil War. Concerns slavery, abolition, and many attempts by black people to improve their position.

315B History of Black People in America Since 1865 (4) (2S)

M. Fletcher. Concerns Emancipation and its continuing effects on black person in America. Life in South, migration to North, and conservative and radical attempts by black community to deal with these problems.

316A History of United States Foreign Relations to 1914 (4) (2S)

J. Gaddis. U.S. foreign relations from war for independence to WW I, stressing development of traditional policies — isolationism, neutrality, Monroe Doctrine — and emergence of U.S. as world power.

316B History of United States Foreign Relations, 1914-1945 (4) (2S)

J. Gaddis. American foreign relations in 2 world wars and inter-war period, emphasizing shifting perceptions of vital interests involved in transition from intervention to nonentanglement to intervention again and emergence as superpower.

316C History of United States Foreign Relations, 1945 to present (4) (2S)

J. Gaddis. American foreign relations in Cold War and after, emphasizing confrontation between U.S. and Communist world, emergence of detente, and background of current foreign policy issues.

317A Ohio History to 1851 (4) (2S)

B. Steiner. Ohio to 1851: prehistoric Ohio, early exploration, settlement, government; statehood and economic development; political parties, anti-slavery movement, constitutional change.

317B Ohio History Since 1851 (4) (2S)

Ohio since 1851; pre-Civil War politics, Civil War. Economic and political transition during post-Civil War. 20th-century problems. Biographical sketches.

318 American Westward Movement (4) (2S)

R. Daniel. American West: Appalachian West, Ohio frontier, Far West. Explorers, fur traders and trappers, miners, cattlemen, stage lines and railroads, farmers. Conservation.

319 Sports in American History (4) (2S)

C. Alexander. Survey of evolution of organized sports in U.S., focusing on major spectator sports. Emphasis on personalities and particular events rather than sociological and psychological theorizing.

320 History of the Middle West (4)

Development of political, economic, and social institutions and attitudes characteristic of Ohio and Middle West since 1787. Includes 20th-century community relationships, problems, and forms of behavior.

321A History of the Military in America: 1600 to 1898 (4) (2S)

M. Fletcher. Military institutions in American history; role of technology in warfare; innovations and reforms in military; war and its conduct; military and civilian society in war and peace.

321B History of the Military in America: 1898 to Present (4) (2S)

M. Fletcher. Continuation of 321A. See 321A for description.

322 Latin America in the 19th Century (4) (2T)

M. Grow. Causes of wars for independence; institutional adjustments during and after wars; problems of regionalism and caudillism; influence of liberalism and positivism in shaping Latin American republics.

323A Latin American Survey, Colonial Period (4) (2T)

M. Grow. Pre-Columbian civilization; conquest and colonization; evolution of institutions; wars for independence.

323B Latin American Survey, National Period (4) (2T)
M. Grow. Breakdown of colonial order and struggle for nationhood in 19th century; 20th-century reform, revolution, and development of modern nation states.

325 Inter-American Relations (4) (2T)

M. Grow. History of Latin American-U.S. economic and diplomatic relations since Independence; state-to-state relations with Latin America.

326A Recent Latin America: Argentina, Brazil and Mexico (4) (2T)

Reshaping and modernization of Mexico by revolution, and struggle to convert Argentine and Brazilian regionalisms, divided societies, and resources into modern, urban integrated nations.

326B Recent Latin America: Andean Nations (4) (2T)

Process of modernization in Ecuador, Peru, and Bolivia since Wars of Independence and its impact on their social, economic, and political structure.

326C Recent Latin America: Central America and the Island Republics (4) (2T)

Search for national identity and modernization in area of special interest to U.S. Consideration of alternative national solutions with special attention to Castro revolution and its historical background.

328 The World of Aristophanes (3) (2H)

D. Richter. Political, social, and cultural life of Athens in so-called Golden Age of ancient Greece, 5th century B.C. Special attention to Aristophanes' comedies as mirror of this period.

329A Ancient Egypt and Mesopotamia (4) (2H)

D. Richter. Prehistoric eras; origins of Mediterranean civilizations; problems of ancient chronology; civilizations of Sumerians, Babylonians, Egyptians, Assyrians, Biblical Hebrews, and Persians. Stresses archaeological and literary sources, comparative social and religious concepts, acculturation, contributions to western civilization.

329B Ancient Greece (4) (2H)

D. Richter. Aegean prehistory, Minoan civilization, Mycenaean Greeks, Dorian invasions, Greek Renaissance, growth of polis, Athenian society and culture, Persian and Peloponnesian Wars, political history of Greece to Alexander. Stresses archaeological sources, mythology, and drama, Hellenic contributions to western civilization.

329C Ancient Rome (4) (2H)

D. Richter. Early peoples of Italy, Etruscans, constitutional development of Republic, growth of empire, civil wars, history of principate to Constantine. Stresses archaeological sources, Latin literature, Roman life and institutions, Roman contributions to western civilization.

330 History through Film (4) (2H)

Examination of selected topics in U.S., European, or Third World history through films and readings accompanied by lec and discussion.

331 The Ancient Greek Games: The Panhellenic Festivals (4) (2H)

W.P. Kaldis. Examines panorama of Greek athletic activity over period of approximately 3,000 yrs, beginning with Minoan or Cretan civilization, ca. 3000 B.C., and terminating with decline of polis, or Greek city-state, ca. 146 B.C. Explains how Panhellenic festivals helped to unite various currents of Greek civilization.

333 Oil, Energy, and International Diplomacy (4) (2S)

G. Doxsee. Energy crisis in historical perspective. Focus on oil industry during past century with particular attention to Middle East and North Africa; economic, environmental, geological, political, and technological elements of current situation.

334 The Arab-Israeli Dispute (4) (2T)

G. Doxsee. Analysis of underlying causes of Arab-Israeli confrontation from 1890s to present, including origins of Arab nationalism and Zionism, evolution of British Mandate in Palestine, Great Power involvement in Middle East, and recent developments in conflict between Israel and Arabs.

335A Survey of Middle East History to 1800 (4) (2T)

G. Doxsee. Islamic history and civilization from rise of Islam to end of 18th century. Includes discussion of role of prophet Mu-

hammad, doctrines and institutional system of Islam, medieval Islamic caliphates and their cultural achievements, and contributions of Persians and Turks to Islamic civilization.

335B Survey of Middle East History Since 1800 (4) (2T)
G. Doxsee. History of Middle East since era of French Revolution. Transformation of Ottoman and Persian Empires into 20th-century Middle East states; impact of nationalism, secularism and industrialism on region; and position of Middle East in contemporary world affairs.

336A North Africa in Modern Times (4) (2T)
G. Doxsee. Maghrib: its geography, ethnic composition, and history since antiquity; French conquest of Algeria, Tunisia, and Morocco; administrative systems; economic development; French-Muslim relations.

336B North Africa Since 1914 (4) (2T)
G. Doxsee. Rise of nationalism; struggle for political independence; political, economic, and social problems in independent North Africa; North Africa in world affairs.

338 History of West Africa (4) (2T)
A. Booth. History of West Africa from early times to present; peopling of sudanic and forest regions; development of trade; Islam and rise of sudanic empires; slave trade and forest states; colonial era; independence movements; problems of nationalism.

338A History of East Africa (4) (2T)
S. Miers. History of East Africa from early times to present, with particular emphasis on period since 1750. Although neighboring countries also studied, greatest attention paid to region which comprises present-day Kenya, Uganda, and Tanzania.

341A Early Africa (4) (2T)
S. Miers. Africa in ancient world; spread of agriculture and iron working; rise of Islam; migrations of peoples; development of states; arrival of Europeans; beginning of slave trade.

341B Traditional Africa (4) (2T)
S. Miers. Slave trade; religious revolutions in western Sudan; development of African states; commercial revolution of 19th century; birth of plural society in South Africa; European partition of Africa.

341C Modern Africa 1890-Present (4) (2T)
S. Miers. Establishment of European rule in Africa; colonial period; rise of nationalism; decolonization and independence; problems of modern Africa.

342A South Africa to 1899 (4) (2T)
A. Booth. Establishment and transformation of African societies (Bantu migrations); coming of Europeans; evolution of Cape society (black, white, colored); conflicting nationalisms; Great Trek; rise of Zulu empire and *meftane*; mineral revolution and subjection of African chiefdoms; British imperialism and coming of South African war.

342B South Africa Since 1899 (4) (2T)
A. Booth. South African (Boer) War and reconstruction; formation of Union; global war and racial/regional/class conflicts over land, labor, and politics; rise of Afrikaner nationalism and triumph of *apartheid*; rise and radicalization of African nationalism; collision of nationalisms and expansion of conflict in 1970s; South Africa and modern world.

343 Revolutions in Southern Africa (4) (2T)
A. Booth. Historical background, and developments up to present, of revolutions in Mozambique, Angola, Zimbabwe (Rhodesia), Namibia (South West Africa), and Azania (South Africa). Format is 2 lec, 1 discussion, and 1 film per wk.

344A History of the Malay World (4) (2T)
W. Frederick. Comparative view of Southeast Asian archipelago, emphasizing Indonesian civilization after 1750. Penetration of west, struggle with imperialism and modernization, and present dilemmas. Indigenous views focus of attention.

344B History of Burma and Thailand (4)
W. Frederick. Comparative study of neighboring Buddhist states, emphasizing themes of change and continuity since mid-18th century. Special attention given to divergent responses to colonialism and western-style development, and similarities in political and social forms.

344C History of Vietnam (4) (2T)
W. Frederick. Modern Vietnamese civilization since 15th century, emphasizing political and social change after 1800. Special attention given to Vietnamese struggle with outside powers, including China, France, U.S., and Soviet Union.

344D Chinese in Southeast Asia (4)
D. Jordan. Historical role of this potent immigrant community in setting of Southeast Asian countries. China's imperial interests in area, tribute systems, relationships between overseas Chinese, European colonialists, and indigenous peoples and role of Chinese communities in contemporary Southeast Asian politics.

345A Southeast Asia to c. 1750: The Creative Synthesis (4) (2T)
W. Frederick. Highlights of pre- and proto-history and development of classical states. Emphasis on cultural synthesis (Hindu, Buddhist, Muslim, and animist influences) and theme of change and continuity in both Great and Little traditions of region.

345B Southeast Asia, c. 1750 to 1942: Change and Conflict (4) (2T)
W. Frederick. Indigenous change and widening effects of western penetration, with emphasis on social and cultural developments. Nature of colonialism in region, and response of colonized seen in light of both traditional and modern influences.

345C Southeast Asia, 1942 to the Present: The Search for Stability (4) (2T)
W. Frederick. Japanese occupation and its relationship to great national revolutions of 1940s. Social and cultural contents of nationalism and revolt, search for new political forms, and struggle against disunity and poverty.

346A Traditional China (4) (2T)
D. Jordan. Follows major aspects of Chinese civilization through their development from Shang bronze age, through primary philosophies, and up to final refinements of its massive imperial government and traditional society.

346B Modern China (4) (2T)
D. Jordan. Weakness of empire in 1800s confronted by dynamic western economic and political imperialism; response to pressures of nationalism from without and from within; great flux in modern Chinese society and politics.

348A Traditional Japan (4) (2T)
D. Jordan. Traces major elements of Japanese culture and thought from their indigenous origins, through major Chinese influence, results of medieval civil warfare, and up to premodern workings of Japan's sophisticated commercial economy.

348B Modern Japan (4) (2T)
D. Jordan. Political weakness of Tokugawa system leading to opening of Japan to western trade and restoration of emperor; favorable economic and political base which allowed Japan to enter successfully into competition with European nations; Japan's ultra-national era and postwar reconstruction.

350 The Civilization of India (4) (2T)
D. Jordan. Environmental and spiritual influences on Indian civilization; Hindu and Muslim lifestyles; successive influxes of foreign peoples and cultures; evolution of Indian traditions. Indian literature and readings on Indian culture set in historical framework.

351 Medieval People (4) (2H)
C. Reeves. Inquiries in depth into lives and epochs of representative individuals of medieval Europe: Middle Ages through biography.

352 Medieval Civilization (4) (2H)
C. Reeves. Survey of cultural and intellectual history. Transmission of Christianity and classical culture to barbarians and their work of combining them into new civilization in early Middle Ages. Medieval civilization at its height: Church, schools and scholastic thought, and secular culture.

353A The Early Middle Ages (4) (2H)
C. Reeves. Foundation of Medieval synthesis, 300-1100: collapse of Roman world, establishment of successor states, spread of Christianity, formation and development of European culture.

- 353B The Later Middle Ages (4) (2H)**
C. Reeves. Maturing of medieval Europe and transition to early modern era, 1100-1450: developments in commerce, religious life and institutions, governments, politics, learning, and secular culture.
- 354 Early Christianity: East and West (4) (2H)**
 Will investigate historical development and spread of Christianity from its origins to about A.D. 600. Content includes Greek and Hebraic backgrounds, early church fathers of east and west, ecumenical councils, early heresies, and development of church doctrine.
- 356A The Italian Renaissance (4) (2H)**
P. Bebb. Major political, social, economic, and cultural currents of Italian city-states from 1150 to 1550. Focus on Dante, Petrarch, Boccaccio, Bruni, Machiavelli, Guicciardini, Michelangelo, Leonardo da Vinci, etc.
- 356B The Northern Renaissance (4) (2H)**
P. Bebb. History of Renaissance outside Italy: politics, economics, sociology, and intellectual currents of Germany, France, Spain, Burgundy, and England from 1300 to 1600. Treated thematically, course focuses on Erasmus, More, Ximenes, Reuchlin, Hutten, Bude, etc.
- 356C The Reformation (4) (2H)**
P. Bebb. Protestant, Catholic, and Counter-Reformations in Europe, showing their relationships to social, political, economic, and religious movements of 15th and 16th centuries. Roles of Luther, Zwingli, Calvin, Cranmer, Erasmus, Loyola, etc.; Protestant and Catholic churches and sects in western and eastern Europe.
- 357 Florentine People (4)**
P. Bebb. Major figures in Florence from 1300 to 1600, from Dante to Galileo; concerns are with some originators of modern thought in areas of artistic theory, poetic form, Italian language, political ideas, scientific method, and historical composition.
- 358A Early Modern Europe, 1559-1648 (4) (2S)**
D. Baxter. Europe from 1559 to 1648. Main political, economic, and social developments in Europe during Age of Spanish Preponderance: Philip II, wars of religion, Richelieu, Thirty Years' War, and ideological struggles.
- 358B Early Modern Europe, 1648-1715 (4) (2S)**
D. Baxter. Europe from 1648 to 1715. Main political, economic, and social developments in Europe during Age of Louis XIV: French hegemony, rise of balance of power, absolutism.
- 358C Early Modern Europe, 1715-1774 (4) (2S)**
D. Baxter. Europe from 1715-1774. Main political, economic, and social developments in Europe during 18th century: despotism, diplomatic revolution, competition for empire, Enlightenment.
- 360 Women in European History (4) (2S)**
R. Harvey. Women and family, women and work, women and feminism, women and male attitudes, and women and politics are major topics of this introduction to women's history in France, England, Germany, and Russia from Renaissance to present, with emphasis on more recent developments. Since our own culture is an outgrowth of European, course is indispensable to understanding of women's history in U.S. Lec, discussions, films, slides, and guest speakers.
- 362A Europe, 1814-1871 (4) (2S)**
L. McGeoch. Europe from Congress of Vienna through Franco-Prussian War, including growth of liberalism and nationalism, revolutions of 1830 and 1848, Industrial Revolution, unification of Italy and Germany, social and intellectual movements.
- 362B Europe, 1871-1914 (4) (2S)**
L. McGeoch. Development of Austria-Hungary, France, Italy, Germany, Great Britain, and Russia, including imperialism, background of WW I, and social and intellectual movements.
- 364A Europe Between World Wars (3) (2S)**
R. Whealey. Fascism, Communism, World Depression, and Twenty-Year Armistice between 1919 and 1939. Economic and cultural approach.
- 364B Contemporary Europe (4) (2S)**
C. Gustavson. Cold War, Communist bloc, European integration, decolonization, Gaullist regime, and problems of present-day Europe.
- 365 Spain and Portugal Since 1898 (4)**
R. Whealey. Survey of political, social, economic, diplomatic, and ideological trends.
- 366A Modern France in the 19th Century (4) (2S)**
J. Chastain. Rise and fall of Napoleon; his impact on France and Europe; monarchist interlude; revolution of 1848 and election of Louis Napoleon; Second Empire, liberal and authoritarian; wars and transformation of Europe; fall of Napoleon and Paris Commune; Third Republic.
- 366B Modern France in the 20th Century (4) (2S)**
J. Chastain. Dynamic and stagnant aspects; nostalgia and rejection of 20th century; impact of 20th century; democracy in France; European and colonial wars; communist movement from Popular Front to Common Program; anti-communism in France; French in changing world; De Gaulle, his predecessors, and his successors.
- 368A Modern Germany in the 19th Century (4) (2S)**
J. Chastain, C. Gustavson. Cosmopolitanism and movement to create national German state; rise of capitalism and decline of handicraft; liberation of German peasantry; revolution of 1848 and reaction; blood-and-iron chancellor; Germany's rise to European predominance; rise of worker movement; German society at turn of century.
- 368B Modern Germany in the 20th Century (4) (2S)**
J. Chastain. Germany on eve of WW I; military fiasco and creation of Weimar Republic; Weimar, Berlin, Munich, and Dresden; attempt to forge democracy; Third Reich and transformation of German society; WW II and Final Solution; Communist Germany and Federal Germany: 2 societies and 2 states since 1945.
- 370 History of Byzantine Empire, 324-1453 (4) (2H)**
W. Kaldis. Decay of Roman World and emergence of Christian empire, 324-717; medieval Roman Empire, 717-1056; weakening of central administration and apparent revival under Comneni, 1025-1204; Byzantium and neighboring world, 1204-1453; church and state; education and learning; Byzantine art; social, political, and military developments.
- 372A Balkans in Early Modern Period, 1453-1804 (4)**
W. Kaldis. Ethnographic structure of Balkan peoples under rule of Ottoman Empire. Ottoman institutions and society; political, social, economic, religious, and cultural developments in Balkans in 15th, 16th, 17th, and 18th centuries.
- 372B Balkans in 19th Century, 1804-1878 (4)**
W. Kaldis. Evolution of modern Balkan nationalism and rise of Balkan states. Ottoman dissolution and Balkan revolutionary nationalism; political, social, economic, religious, and intellectual developments; domestic Balkan policy and foreign intervention.
- 372C Balkans in 20th Century, 1878 to Present (4) (2S)**
W. Kaldis. Historical, cultural, and ethnic background of Balkan peoples. Social, economic, political, and intellectual developments in Balkans and East Europe; communication of southeast European states.
- 374A Balance of Power: Napoleon to the Kaiser (4) (2S)**
L. McGeoch. Diplomatic history from Congress of Vienna to WWI, including age of Metternich, Italian and German unification, new imperialism, and prewar alliance and alignments.
- 374B History of International Diplomacy, 1914-1939 (4) (2S)**
R. Whealey. International problems of peace and war, international organization and alliances. Theme: origins of WW II.
- 374C History of International Diplomacy, 1939 to Present (4) (2S)**
R. Whealey. International problems of peace and war on worldwide scale since 1939, international organization and alliances. Theme: global balance of power.
- 376J Biography: Leaders in 19th Century Europe (4) (1J)**
L. McGeoch. Lives of great and near great as they contributed to determining historical development and change in 19th-century Europe. Instructional method based on putting writing skills into practice aimed at improving organization, clarity, and style.

379 The Development of Modern Science (4) (2S)

R. Rauschenberg. Survey of development of science from Renaissance. History of physical and natural sciences in ages of Copernicus, Newton, Linnaeus, and Darwin.

381 History of the Family (4) (2S)

D. Baxter. Chronological examination of historical development of western family (European and American) from Middle Ages to 20th century. Women's roles examined.

382A History of Russia (3) (2S)

C. Gustavson. Russian origins, Greek and Mongol influences, expansion of Muscovy, Ivan the Terrible, Peter the Great, Catherine the Great, Russia as great power, and shapes of its 19th-century society.

382B The Communist Revolution (3) (2S)

C. Gustavson. From tsarist Russia to Soviet Union. Background for revolution, Lenin and Trotsky, Communist Revolution of 1917, civil war and foreign intervention, consolidation of power.

382C Soviet Union (3) (2S)

C. Gustavson. Soviet Union since death of Lenin (1924). Stalinism, WW II and expansion, Khrushchev, Brezhnev. Emphasis on internal affairs.

389 Later Medieval England, 1307-1485 (4) (2H)

C. Reeves. Age of Chaucer and Wars of the Roses. Investigation of political, social, intellectual, ecclesiastical, and economic aspects of period of ferment and rapid change.

390A Tudor England (4) (2S)

R. Harvey. England in 16th century: Tudor absolutism, English Reformation, and major cultural and economic developments of Shakespeare's England.

390B Stuart England (4) (2S)

R. Harvey. England in 17th century: constitutional crisis of Stuart period, Republican experiment under Cromwell, and major cultural and economic developments.

391A English History to 1688 (4) (2S)

R. Rauschenberg. For English, political science, and prelaw majors and general students of history. Survey of institutional aspects of medieval England and social, political, and constitutional developments in Tudor and Stuart periods.

391B English History Since 1688 (4) (2S)

R. Rauschenberg. For English, political science, and prelaw majors and general students of history. Emphasizes cultural and economic developments, growth of British Empire, constitutional and social reforms, and impact of WW I and WW II.

392A Georgian England (4) (2S)

R. Rauschenberg. Survey of political, social, intellectual, cultural, and economic developments of England in years prior to and during American and French revolutions.

392B Victorian England (4) (2S)

R. Rauschenberg, D. Richter. Survey of England's history in 19th century, including examination of major political, cultural, and economic trends.

392C 20th Century England (4) (2S)

R. Rauschenberg. Survey of English history in 20th century concentrating on political, cultural, and economic developments.

394A The Medieval English Constitution (4) (2S)

C. Reeves. English government from Anglo-Saxon times to end of Middle Ages. Growth of machinery of monarchy, central administration, courts and common law. Rise of Parliament.

394B The Modern English Constitution (4) (2S)

R. Harvey. Emergence of modern English constitution during 16th and 17th centuries: creation and growth of Tudor Constitution; significance of English Reformation for constitution; Tudor Parliament; "Century of Revolution" (1603-1689) and crisis of Constitution; problems of sovereignty and obligation; constitution today.

395 History of Canada (4) (2S)

R. Rauschenberg, J. Chastain. Introduction to Canada: study of its exploration, and development under France and England, and its emergence as important modern nation.

396J Writing on Historical Themes (4) (1J)

Prereq: jr rank. Students will study and write on selected historical themes. Equal emphasis on historical materials and writing. Fulfills jr-level English composition requirement.

397T Honors Tutorial Study, European History (1-5)

Prereq: admission to Honors Tutorial College. (fall) Covers European history from Renaissance to present.

398T Honors Tutorial Study, European History (1-5)

Prereq: 397T. (winter) Independent study. European history.

399T Honors Tutorial Study, European History (1-5)

Prereq: 398T. (spring) Independent study. European history.

401A Studies in Colonial American History (4)

Prereq: 24 hrs and perm. *B. Steiner.* Literature and source materials of colonial American history. Readings and reports.

401B Studies of the Era of the American Revolution (4)

Prereq: 24 hrs and perm. Literature and source materials of American Revolution. Readings and reports.

405 Studies in the Foundation of the American Republic, 1783-1819 (4)

Prereq: 24 hrs and perm. Literature and source materials of early national period of American history. Readings and reports.

407 Studies of the Era of Sectional Controversy: 1819-1850 (4)

Prereq: 24 hrs and perm. Literature and source materials of era of sectional controversy, 1819-1850. Readings and reports.

409 Studies in the Era of the Foundations of Modern America, 1850-1901 (4)

Prereq: 24 hrs and perm. Literature and source materials for period 1850-1901 in U.S. history. Readings and reports.

411 Studies in the History of the United States in Recent Times (4)

Prereq: 24 hrs and perm. *A. Hamby, G. Lobdell.* Literature and source materials of recent U.S. history. Readings and reports.

414S Two Decades in Confrontation: The Art and the History of the 1950s and the 1960s (4) (3S)

Prereq: sr rank. Taught by professor of history and professor of art. Opportunity for majors in the arts and in social sciences to search for motivations and values in recent U.S. history by reviewing the arts and political, social, and scientific events of two postwar decades, 1950s and 1960s.

415 Studies in the Social, Cultural and Intellectual History of the United States (4)

R. Daniel, C. Alexander. Selected topics.

417 Studies in the History of American Foreign Relations (4)

Prereq: 24 hrs or perm. *J. Gaddis.* Literature and source materials of American foreign relations. Readings and reports.

421 Studies in Regional History (4)

Prereq: 24 hrs and perm. Literature and source materials of U.S. regional history. Readings and reports.

423 Studies in Latin American History, 1750-1880 (4)

Prereq: perm. Literature and source materials of Latin American history, 1750-1880. Readings and reports.

427 Studies in Recent Latin American History (4)

Prereq: perm. *M. Grow.* Literature and source materials of recent Latin American history. Readings and reports.

429 Studies in the History of Ancient Greece (4, max 8)

Prereq: 24 hrs and perm. *D. Richter.* Literature and source material of ancient Greek civilization. Readings and research paper. Themes vary from qtr to qtr. May be repeated for credit.

435 Studies in Middle East History (4)

Prereq: 24 hrs or perm. *G. Doxsee.* Selected topics on Middle East since 1914. Readings and reports.

441 Studies in African History (4)

Prereq: 24 hrs and perm. *A. Booth, G. Doxsee, S. Miers.* Literature and source materials of African history. Readings and reports.

445 Studies in the History of Southeast Asia (4)

Prereq: two 300- or 400-level courses in social sciences or humanities dealing with Asia. *W. Frederick.* Literature of Southeast

Asian history and culture generally, with particular emphasis on selected developments in 19th and 20th centuries. Readings and reports.

449 Studies in the History of East Asia in Modern Times (4)

Prereq: two 300- or 400-level courses in social sciences or humanities dealing with Asia. *D. Jordan*. Historical literature relating to process of modernization of China and Japan from 1860s to 1960s. Readings and reports.

459 Philosophies of History (5) (3S)

Prereq: sr rank; one upper-level course in history or philosophy. *C. Reeves*. Study and discussion of different philosophies of history dating from ancient to modern period. Analysis of how thinkers have taken empirical data of history and shaped them into a metaphysical form.

461 Proseminar in French Revolution (4)

Prereq: 24 hrs and perm. *C. Gustavson*. Oral reports and class discussion. Myth and reality of revolution. Study of ideas, episodes, and individuals in French Revolution.

463 Studies in 19th Century Europe (4)

Prereq: 24 hrs or perm. *L. McGeoch*. Literature and source material of 19th-century Europe. Readings and reports.

467 Studies in Modern France (4)

Prereq: 24 hrs and perm. *J. Chastain*. Literature and source material of modern France. Readings and reports.

483 Studies in Russian and Soviet History (4)

Prereq: 24 hrs and perm. *C. Gustavson*. Literature and source material of Russian and Soviet history. Readings and reports.

491 Studies in Early Modern English History (4)

Prereq: 24 hrs plus perm. *R. Harvey*. Studies in early modern English history from multi-disciplinary perspectives.

493 Studies in British History Since 1714 (4)

Prereq: 24 hrs and perm. *R. Rauschenberg*. Literature and source material of British history since 1714. Readings and reports.

496 Quantitative Methods in History (4)

P. Field. Introduction to descriptive and inductive statistical techniques used in historical research and analysis of current literature employing such techniques. Instruction in use of computer.

497T Advanced Honors Tutorial Study (1-5)

Prereq: 299T, 399T. (fall) Independent study, advanced level.

498 Problems in History (1-5, max 9)

Prereq: perm. Study, reading, research, and writing on selected topic; intended for students who plan to graduate with honors in history. Arrangements should be made during jr yr.

498T Advanced Honors Tutorial Study (1-5)

Prereq: 497T. (winter) Independent study, advanced level.

499 Honors Studies of Selected Historical Topics (1-5, max 15)

Prereq: perm. Study, reading, research, and writing on selected topic; intended for students who plan to graduate with honors in history. Arrangements should be made during jr yr.

499T Advanced Honors Tutorial Study (1-5)

Prereq: 498T. (spring) Independent study, advanced level.

HOME ECONOMICS

Child Development and Family Life

160 Introduction to Child Development (4) (2S)

(fall, winter) Fundamental patterns of development and behavior during prenatal period through early childhood. Video-taped observations of children in child-care settings. 4 lec, 1 lab. No credit awarded if EDEL 200 or PSY 273 has been taken.

299 Sophomore Practicum — Professional Assessment (5)

Prereq: soph rank, perm. (winter) Provides professional experience for sophs who have declared majors in child development and family life. Seminar sessions and performance assessment provide opportunity to assess professional competence at this level.

360 Human Sexuality (3) (2S)

(fall, winter) *E. Stricklin*. Exploration of effect of one's own human sexuality on aspects of one's ability to form relationships which are integrative, creative, and recreative. Emphasis on realization of one's own dynamic potential in wholeness of life pattern and in relationships, in light of scientific research.

361 Principles of Preschool Guidance (4)

Prereq: 160 or equiv, perm. (fall) *J. Nehls*. Application of theories and principles of preschool guidance by directed observation of adult-child interactions, and supervised participation in early childhood education programs. 2 lec, 3 lab.

363 Creative Experiences with Preschool Children (4)

Prereq: 361. (fall) *M. King*. Selection, preparation, presentation, and evaluation of activities and materials in art, music, language, psychosocial, and physical development for early childhood programs. 3 lec, 3 lab.

364 Premath and Science with Young Children (4)

Prereq: 361, BOT 101 or ZOOL 101. (fall) *M. King*. Examples of early childhood programs, primary elements and issues that differentiate them. Selection, preparation, presentation, and evaluation of premath and science activities and materials. 3 lec, 3 lab.

365 Infant Education (4)

Prereq: HECF 160, 361. (winter) *M. King*. Knowledge of ways in which children from birth to 3 yrs learn; opportunity to structure environment to foster social, emotional, cognitive, and physical development of infant, as well as understanding of issues and trends in infant education.

370 Family Living (3)

(fall, winter) Person-centered analysis of basic human relationship processes leading to successful modern American marriage and family experience. Special discussion and analysis of problems in beginning family stage. Not open to fr. 3 lec.

371 Family Development (3)

Prereq: 5 hr general psychology. (fall, winter) *E. Stricklin*. Synthesis of essential concepts useful in comprehending families in light of developmental concept for family analysis through stages of family life cycle. 3 lec.

380 Death and Dying (4)

Prereq: jr rank or perm. (spring) *E. Stricklin*. Examines why people fear death, how death affects family relationships, dynamics of guilt and bereavement, meanings of death, processes of dying, disposition of body, caring relationships. Synthesizes multiple dimensions of death and dying.

399 Junior Practicum — Professional Development (5)

Prereq: jr rank, perm. (spring) Provides student with practical field-based experience in professional areas. Competency assessment made at jr level.

400 Senior Seminar (3)

Prereq: concurrent with 499 or 464. Provides opportunity for comprehensive assessment in relation to personal and professional growth prior to exiting program as professional in child development and family life.

462A Pluralistic Life Styles (2)

Prereq: jr or sr rank or perm. (fall) *E. Stricklin*. Analysis of emerging pluralistic marriage and family life patterns in American society.

462B Parenthood (2)

Prereq: jr or sr rank, perm. (fall) *Staff*. Analysis of dynamics of parenthood.

462C Middle Childhood (2)

Prereq: jr or sr rank, perm. (winter) *Staff*. Analysis of developmental tasks of middle childhood years as they reflect and influence family guidance and transmission of values.

462D The One-Parent Family (2)

Prereq: jr or sr rank or perm. (winter) *E. Stricklin*. Analysis of dynamics of 1-parent family in light of its needs, challenges, and distinctive characteristics.

462E Youth Identity Crisis (2)

Prereq: jr or sr rank, perm. (spring) *Staff*. Analysis of identity crisis in terms of its psychosocial aspects of adolescence.

462F The Aged Family (2)

Prereq: jr or sr rank or perm. (spring) *E. Stricklin*. Synthesis of multiple dimensions of aged family.

463 Preschool Administration (5)

Prereq: 363 or 364. (spring) *M. King*. History, philosophy, and objectives of preschool education including current trends. Problems in organizing and administering preschools, play groups, and Head Start programs with emphasis on housing, staff, schedules, and financing. Field trips to selected programs. 4 lec.

464 Early Childhood Practicum (6-12)

Prereq: 363 or 364. (winter, spring) *M. King*. Lab experience in planning, guiding, supervising, and evaluating preschool children's growth and behavior in all phases of early childhood education programs. 1 lec, 20 lab.

465 Parent Education (4)

Prereq: 160. (fall) Philosophy, techniques, materials, and methods used in working with parents. Opportunities for observation and participation with parent groups, parent conferences, and home visitations.

467 Theories of Child Development (4)

Prereq: jr or sr rank, perm. (fall) *Staff*. Review of theories of child development with synthesis approach for student in early childhood education programs.

471 Family Life Education (4)

Prereq: perm. History, philosophy, and objectives of family life education, including current trends. Selected fundamental educational problems explored. Examination of various dimensions of teacher's role and critical appraisal of student's professional competency to teach classes in family life education.

472 Special Studies in Human Development (2-5)

Prereq: HECF 462/562. In-depth study in selected area.

479 Special Studies in Family Ecology (2-5)

Prereq: HECF 462/562. In-depth study in selected area.

499 Field Experience in Child Development and Family Living (12)

Prereq: 18 hrs, sr rank, perm. On-the-job training through cooperation with social, welfare or community agencies, hospitals, early childhood programs.

Consumer Education

250 Introduction to Independent Living Rehabilitation (3)

(fall) *J. Varner*. Explores historical development, philosophy, legislation, community resources, research, and professional literature which provide base of knowledge in field of independent living. Focuses on interdisciplinary cooperation in providing services in independent living.

299 Sophomore Practicum — Professional Assessment (2-5)

Prereq: soph rank, perm. (fall) *L. Cibrowski*. Provides professional experience for sophs who have declared majors in consumer service and education. Lab experience, seminar sessions, and performance assessment provide opportunity to assess professional competence at this level.

340 Teaching of Home Economics (2-4)

Prereq: 299, jr rank. (winter) *L. Cibrowski*. Home economics programs at jr and sr high school level. Special emphasis on vocational education, curriculum development, evaluation procedures, and methods of teaching.

341 Job Training Methods (4)

Prereq: 24 hrs of home economics. *L. Cibrowski*. Exploration and development of personal and professional competencies necessary for teaching in vocational home economics job training programs.

390 Family Consumer Economics (3)

(fall, spring) *J. Varner*. Management of personal and family financial problems. Emphasis on consumer's role in economy.

391 Equipment (2-4)

Prereq: 390. (fall) Selection and use of household equipment including materials, construction, operation, and care. 4 lec, 2 lab.

395 Home Management (3)

Prereq: soph rank. (spring) *J. Varner*. Decision-making applied to use of family resources with purpose of creating family environment in which optimum human development will occur. 3 lec.

396 Home Management Laboratory (4)

Prereq: 395, soph rank, HEFN 120, perm. (spring) *J. Varner*. Principles of decision-making and management in group living situation. Home Management House experience provided.

399 Junior Practicum — Professional Development (2-5)

Prereq: 340, jr rank, perm. (spring) *L. Cibrowski*. Lab experiences with school and community agencies. Competency assessment at jr level.

400 Senior Seminar (1-3)

Prereq: concurrent with 499B. *S. Slater*. Provides opportunity to share ideas and assess oneself in relation to personal and professional growth before exiting program as professional home economist.

439 Studies in Household Equipment and/or Management (2-4, max 6)

Prereq: 391, 395. Provides opportunity for student to pursue study in selected area of home management and/or household equipment, under supervision.

441 Evaluation in Home Economics (3)

Prereq: 24 hrs of home economics. Evaluation and assessment methods and techniques in relation to process and products in home economics programs and professions.

442 Home Economics Education Practicum (2-4, max 8)

Prereq: perm. Concentrated study in area of interest such as adult programs, special education programs, job training experience, and work with handicapped people.

443 Vocational Home Economics (4)

Prereq: 340 or teaching experience in home economics. *S. Slater*. History and philosophy of vocational home economics. Contemporary trends, methods, sources of materials, and evaluation. Observation arranged.

444 Home Economics in Adult Education (4)

Prereq: 26 hrs. (winter) *J. Varner*. Organization procedures, curriculum materials, and methods of conducting adult education groups in home economics.

445 Current Developments in Home Economics Education (4)

Prereq: 340 or 443. *S. Slater*. Current trends and developments in home economics education programs at secondary and post high school levels in relation to curricular developments, evaluation procedures, legislation affecting program, and research.

450 Problems in Teaching Home Economics (2-4, max 6)

Prereq: 26 hrs. *S. Slater*. Individual problems in teaching.

452 Home Management for the Disabled Homemaker (4)

(spring) *J. Varner*. Recognizes unique home management demands faced by persons with disabilities and their families and determines creative method and identifies resources to meet those demands.

453 Functional Assessment in Independent Living (3)

(winter) *J. Varner*. Explores functional assets and limitations of persons with disabilities in completing household tasks, identifies methods and materials used in assessment of functional limitation, and determines resources and strategies to increase ability of clients to perform household tasks.

492 Household Equipment Techniques (3)

Prereq: 391. *J. Matthews*. Critical analysis of home equipment relative to durability and effective use. 1 lec, 4 lab.

499A Field Work in Home Economics — Extension and/or Business (5-12)

Prereq: 18 hrs, sr rank, perm. On-the-job training through cooperation with business organizations, department stores, radio and television stations, and Home Economics Extension Department of Ohio State University.

499B Field Work in Home Economics — Job Training (5-12)

On-the-job training in area of specialization. Taken concurrently with HECE 400.

499C Field Work in Home Economics: Independent Living (5-12)

(arranged) Provides supervised, practical experience in independent living rehabilitation setting in which students will assume responsibility for partial caseload of clients under supervision of faculty member and professional in field of independent living.

General Home Economics

101 Professional Awareness (2) (2H)

Personal and professional awareness with emphasis on current trends in home economics and career opportunities.

459 Home Economics Seminar, Workshop and Short Course in International Service (2-4)

Prereq: jr rank, perm. Special seminar or workshop for international students or for home economics majors who want to prepare for international service.

479A Workshop in Home Economics (1-6)

Special workshops on topics related to home economics. 479A — home economics education.

479B Workshop in Home Economics (1-6)

Continuation of series beginning with 479A. See 479A for general description. 479B — clothing and textiles.

479C Workshop in Home Economics (1-6)

Continuation of series beginning with 479A. See 479A for general description. 479C — foods and nutrition.

479D Workshop in Home Economics (1-6)

Continuation of series beginning with 479A. See 479A for general description. 479D — child development.

479E Workshop in Home Economics (1-6)

Continuation of series beginning with 479A. See 479A for general description. 479E — consumer economics.

479F Workshop in Home Economics (1-6)

Continuation of series beginning with 479A. See 479A for general description. 479F — home furnishings.

479G Workshop in Home Economics (1-6)

Continuation of series beginning with 479A. See 479A for general description. 479G — home management.

479H Workshop in Home Economics (1-6)

Continuation of series beginning with 479A. See 479A for general description. 479H — household equipment.

479I Workshop in Home Economics (1-6)

Continuation of series beginning with 479A. See 479A for general description. 479I — school lunch management.

479J Workshop in Home Economics (1-6)

Continuation of series beginning with 479A. See 479A for general description. 479J — family life education.

490A Independent Study (2-5, max 15)

Prereq: perm. Independent study, advanced level under direction of faculty member in area of specialization. 490A — consumer service and education.

490B Independent Study (2-5, max 15)

Prereq: perm. Continuation of series beginning with 490A. See 490A for general description. 490B — human development and family ecology.

490C Independent Study (2-5, max 15)

Prereq: perm. Continuation of series beginning with 490A. See 490A for general description. 490C — human environment and design.

490D Independent Study (2-5, max 15)

Prereq: perm. Continuation of series beginning with 490A. See 490A for general description. 490D — human nutrition and food science.

491A Seminar or Short Course in Home Economics (2-4)

Prereq: perm. Recent developments in any of following areas. 491A — child development and family life.

491B Seminar or Short Course in Home Economics (2-4)

Prereq: perm. Continuation of series beginning with 491A. See 491A for general description. 491B — foods and nutrition.

491C Seminar or Short Course in Home Economics (2-4)

Prereq: perm. Continuation of series beginning with 491A. See 491A for general description. 491C — home economics education.

491D Seminar or Short Course in Home Economics (2-4)

Prereq: perm. Continuation of series beginning with 491A. See 491A for general description. 491D — housing and management.

491E Seminar or Short Course in Home Economics (2-4)

Prereq: perm. Continuation of series beginning with 491A. See 491A for general description. 491E — textiles and clothing.

491F Seminar or Short Course in Home Economics (2-4)

Prereq: perm. Continuation of series beginning with 491A. See 491A for general description. 491F — research.

Food and Nutrition

120 Meal Management (3)

J. Yuhas, P. Mugwira. Principles of food preparation and nutrition emphasizing use of time, energy, and resources in management of meals. Government regulations controlling food supply. 2 lec, 2 lab.

128 Introduction to Nutrition (4) (2A)

B. Sullivan, J. Yuhas. Nutrients, their food sources and functions in body, application to planning adequate diet throughout life cycle.

222 Food Science and Principles (4)

J. Yuhas. Scientific principles applied to selection, storage, and preparation of foods. 3 lec, 2 lab.

232 Infant and Child Nutrition (4)

P. Mugwira. Dietary factors related to nutritional status in pregnancy, infancy, preschool, and school-age children. Contribution of nutrition education and school lunch program in school curriculum. 4 lec.

299 Sophomore Practicum — Professional Assessment (2-5)

Prereq: 120, 128, 222, HEG 101, English composition, INCO 101/103, CHEM 121, 122. (spring) Professional experiences for sophs who have declared majors in area of human nutrition and food science and to provide opportunity for assessment of each student's competencies in area at this level.

321 Creative Cookery and Food Styling (3)

Prereq: 120, 222, and art. Intensive study of elements of color, design, flavor and texture of food products and styles of cookery and presentation. 1 lec, 4 lab.

325 Food and the Consumer (3)

Prereq: ECON 101/301. Role of government and consumer organizations in consumer protection and consumer's responsibilities in obtaining and consuming safe food. Factors influencing food supply.

334 Quantity Food Production (4)

Prereq: 128, 222. (fall) *P. Mugwira*. Food preparation principles applied to large quantity food production and service in institutions. Experience in residence halls. 2 lec, 4 lab.

399 Junior Practicum — Professional Development (2-5)

Prereq: foods and nutrition major, jr rank, perm. (fall) *B. Sullivan*. Practicum in human nutrition and food science. Work with community agency, utility company, institutional food service, or other specialized food-related company in immediate area.

400 Senior Seminar (1-3)

Prereq: foods and nutrition major, sr rank, perm. Provides opportunity for students to demonstrate their personal and professional growth by sharing experiences in verbal and written form with staff and fellow students. Taken concurrently with or following 499 —Field Experience.

422 Experimental Foods (4)

Prereq: 222 or equiv and organic chemistry. (spring) Factors which affect results of different methods used in food preparation. Research techniques using subjective and objective evaluation of products. 3 lec, 2 lab.

423 Food Preservation (4)

Prereq: 128, 222, microbiology. (alternate years) *J. Yuhas*. Principles of food preservation, factors affecting palatability and nutritive value of foods, comparative studies of products. 2 lec, 2 lab.

425 Teaching of Foods and Nutrition (3)

Prereq: sr rank. Organization of materials and methods of presenting principles of food preparation and nutrition. For majors in foods and nutrition. 1 lec, 4 lab.

426 World View of Nutrition (3)

Prereq: 128, jr or sr rank. (winter) *B. Sullivan*. Survey of world food situation with consideration of environmental, cultural, governmental, and economic factors that relate to food production and consumption. Evaluation of these patterns in meeting dietary needs.

427 Studies in Foods and Nutrition (2-4)

Prereq: perm. Directed studies in some aspect of foods and/or nutrition; topics selected by students with approval of staff member, frequent conferences.

428 Advanced Nutrition (4)

Prereq: 128, biochemistry and human physiology. (fall) *B. Sullivan*. Biochemical and physiological processes in nourishment of body. Determination of nutrient needs and evaluation of nutritional status. Animal feeding experiments. 4 lec, lab arranged.

429 Community Nutrition (3)

Prereq: 128, jr or sr rank. (spring) *B. Sullivan*. Assessment of community nutrition needs. Survey of agencies and programs providing services. Role of nutritionist. Methods and resources for nutrition education. Legislation.

430 Therapeutic Nutrition (4)

Prereq: 428, biochemistry and human physiology. (winter) *B. Sullivan*. Use of dietary modification in prevention and treatment of disease. Nutritional assessment. Problems in nutritional care.

431 Studies of Science of Nutrition (3-4, max 8)

Prereq: 428, biochemistry and human physiology. Nutrition as related to physiological and metabolic processes. Individual research project.

437 Food Service Systems I (4)

Prereq: 299, 334, MGT 309. (winter, alternate years) Introduction to tools and functions of management in food service with emphasis on organization structure, menu planning, staffing, work methods, human relations skills, sanitation, and safety. 4 lec, lab arranged.

438 Food Service Systems II (4)

Prereq: 334, 499. (winter, alternate years) *P. Mugwira*. Institutional food purchasing, kitchen layout design, equipment selection, and cost control. 4 lec, lab arranged.

499 Field Experience — Foods and Nutrition (5-12)

Prereq: sr rank, perm. On-the-job experience through cooperation with hospitals, community agencies, business organizations, and media.

Interior Design

180 Furnishing Today's Home (3)

E. Langford, J. Matthews. Practical and esthetic study of home furnishings, including basic art qualities, studies in color and design, materials used in furnishings, selection, and arrangement of furniture and accessories.

280 Interior Design Studio I (4)

(winter) Planning, designing, and specification of materials and furnishings for residential spaces. Lab experiences include executing plans, elevations, sample boards, cost estimates, rationales, and oral presentations.

281 Interior Design Studio II (4)

Prereq: IT 105, HEID 180. (fall) Space relationships, color for interiors, and ergonomics. Lab experiences include color, shadow, and texture rendering.

282 Interior Design Studio III (4)

(spring) Design of multi-housing with special emphasis on designing for people with special needs. Includes planning interiors for elderly and persons with various disabilities. Includes related readings.

299 Sophomore Practicum — Professional Assessment (2)

Prereq: 282. (winter) Study of field of interior design concentrating on career opportunities and professional organizations. Assessment of student's competencies and portfolio review. Recommendations made by faculty if student will be allowed to continue in interior design program.

350 Architectural and Furnishings Materials (3)

Prereq: jr or soph rank or perm. Investigation of interior finish materials. Characteristics and applications of synthetic and natural materials. Considerations for architectural surfaces, furniture and other interior finishes. Evaluation of durability and maintenance potentials. Specification development and psychological implications of colors and textures.

384 Family Housing (3)

Prereq: majors, IT 105, 108, and art. (fall, winter) *E. Langford*. Housing needs of family and factors influencing housing. Evaluation and designing of floor plans for effective use of space in home.

385 Home Furnishings Workshop (4)

Prereq: 180 or 6 hrs art, perm. *E. Langford*. Lab problems in advanced techniques in home furnishings, including upholstering, refinishing furniture.

388 Lighting Fundamentals (3)

Prereq: jr rank or perm. (fall) Fundamental concepts of illumination. Examination of vision, light, color, tasks, and quality of light. Terminology, symbols, concepts, and basic equations. Exploration of light sources and controls. Calculation of power consumption. Study of physiological and psychological considerations.

389 Lighting Design and Application (3)

Prereq: jr rank or perm. (winter) Application and design of interior illumination systems. Use of manufacturer product catalogs and data. Consideration of special lighting applications. Further study of light quality and color effects. Use of lighting formulas and calculations.

399 Junior Practicum — Professional Development (3)

Prereq: jr rank, perm. (spring) Professional development and assessment through interviews with personnel in field, field trips, and investigation of business practices and procedures.

400 Senior Seminar — Professional Evaluation (1)

Prereq: concurrently with 499. (fall, spring) Provides opportunity for students to demonstrate personal growth by sharing experiences in verbal and written form to staff and fellow students.

480 History of Furniture (3-4)

Prereq: 180 and art or design, perm. (fall, winter) *E. Langford*. Qualities and styles of furniture and furnishings. Emphasis on periods of past and their esthetic influence on present.

481 Contemporary Design in Furnishings (3)

Prereq: 480, 6 hrs of art or perm. (spring) *E. Langford*. Furnishings and interiors of present era; factors that have influenced development of contemporary design; important designers and their work.

482 Design in Home Accessories (3)

Prereq: 480, 6 hrs of art or perm. (winter) Investigation of development of design in accessories of glass, ceramics, textiles. Oriental rugs, metals such as silver and pewter. Use of accessories in home and in displays.

483 Advanced Interior Design Studio II (4)

Prereq: 282. (fall) Investigation, design, and specification of materials and furnishings for offices. Office design will range from single-occupancy office, to large multi-purpose office space, including concept of office landscaping. Lab experiences include executing plans, elevations, perspectives, cost estimates, rationales, and oral presentations.

484 Advanced Interior Design Studio I (4)

Prereq: 483. (winter) Investigation, design, and specification of materials and furnishings for motels and restaurants. Experiences include executing plans, elevations, perspectives, cost estimates, rationales, and oral presentations.

485 Advanced Interior Design Studio III (4)

Prereq: 484. (spring) Investigation, design, and specification of materials and furnishings for retailing interiors. Lab experiences include executing plans, elevations, perspectives, cost estimates, rationales, and oral presentations.

499 Field Work — Interior Design (5-12)

Prereq: 18 hrs, sr rank, perm. On-the-job training through cooperation with residential and contract firms for interior design majors. Concurrently with 400.

Textiles and Clothing

117 Textiles and Dress and the Environment (3)

Prereq: PSY 101 or SOC 101 or concurrently. *Staff*. Contemporary uses and roles of textiles and clothing as affected by economic, cultural, social, and psychological forces.

213 Design Analysis: Theory and Principles (5)

Prereq: 3-qr fr with perm, 117. *J. Izard*. Fundamental principles as applied to understanding use and fit of commercial pattern, and apparel construction. Emphasis on scientific thought, creative expression, and construction problems. 2 lec, 6 lab.

299 Sophomore Practicum — Professional Assessment (2-5)

Prereq: HEG 101, 117. (fall) *Staff*. In-depth study of field of textiles and clothing, concentrating on career responsibilities and opportunities, language of fashion and importance and technique of developing professional portfolio. Mini-experiences related to chosen option included which will give students opportunity to assess their capabilities for meeting entry-level competencies as professionals.

312 Studies in Clothing and Textiles (2-4, max 8)

Prereq: perm. Selected topic in clothing and textiles.

313 Design Analysis: Experimental (2-4)

Prereq: C or better in 213. (fall) *Staff*. Problems and construction techniques in handling fashion fabrics. Creative expression through experimenting with fashion fabrics.

315 Elementary Textiles (4)

Prereq: not open to fr. *Staff*. Emphasis on textile yarns, fibers, fabrics, and finishes with reference to production, processing, use, and care. 4 lec, 1 lab.

316 Design Analysis: Tailoring (4)

Prereq: C or better in 213. *Staff*. Advanced problems with emphasis on couturier tailoring techniques related to apparel construction. 2 lec, 4 lab.

318 Fashion Merchandising — Promotion (4)

Prereq: 213, 315, JOUR 250 or perm. (winter) *T. Gainer*. Factors influencing planning, promoting, presenting, and selling of fashion goods. Study of store image development, layout, and visual presentation techniques. Development of marketing problems including alternative promotional techniques and cost control. 4 lec.

399 Junior Practicum —**Professional Development (2-5)**

Prereq: HETC 299, jr rank, perm. (winter) *Staff*. Professional development and assessment through interviews with personnel in field, field trips, and mini-professional experiences.

400 Senior Seminar —**Professional Evaluation (1-3)**

Prereq: 399, concurrently with 499. (arranged) *Staff*. Provides opportunity for students to demonstrate personal and professional growth by sharing experiences in verbal and written form to staff and fellow students.

405A History of Costume (4)**(2H)**

(fall) *Staff*. Costume through ages as reflection of historical period and source for present-day design.

405B History of Textiles (2)

(winter) *Staff*. Textiles through ages as reflective of historical period and source for present-day design.

407 Textile and Fashion Industry (4)

Prereq: 315, JOUR 250. (winter) *Staff*. Economic factors influencing textile and fashion industry treated in depth. 4 lec.

415 Design Analysis: Flat Pattern (4)

Prereq: C or better in 213, 315 or perm. *Staff*. Creative apparel design and interpretation with emphasis on flat pattern manipulation.

416 Design Analysis: Draping (4)

Prereq: 213, 313, 415, or perm. *Staff*. Designing of apparel using draping techniques. Emphasis on fabric as medium rather than pattern development in design process.

417 Fashion Merchandising — Management (4)

Prereq: jr rank, 315, MGT 300, CS 150. (fall) *Staff*. Marketing and management principles related to buying and controlling of merchandise. Emphasis on organizational structure, personnel management, planning, buying, and controlling merchandise assortments. Retail mathematics problems included.

418 Quality Control (4)

Prereq: jr rank, 315 or perm. (spring) *Staff*. Principles, techniques, and standard testing methods of quality control for textiles, clothing, and interior design. Lab sessions will emphasize standard textile testing procedures and research methods. Federal and state laws and codes designed to protect consumer also discussed.

419 Studies in Textile Testing (3)

Prereq: perm. *Staff*. Individual research and lab testing of problems in advanced textiles.

420 Fashion Study Tour (2-3)

Prereq: jr rank or perm. (spring) *T. Gainer*. Directed study problems related to textile and apparel industry in conjunction with on-site tours of textile and apparel market centers.

454 Clothing for Persons with Special Needs (3)

(spring) Recognizes and evaluates various dressing techniques and functional design alternatives available to further assist independence of individuals with special needs. Focus given to populations such as elderly, physically or mentally disabled, and temporarily or permanently disabled.

499 Field Experience — Textiles and Clothing (4-12)

Prereq: 18 hrs, sr rank and perm. *T. Gainer*. On-the-job experience through cooperation with industry and/or retail establishments. For fashion merchandising majors.

HUMAN RESOURCE MANAGEMENT

420 Administration of Personnel (4)

Prereq: MGT 300 or perm. Survey of human resource management practices in areas of human resource planning, recruitment, selection, training and development, performance appraisal, compensation, discipline, safety audits, and personnel research. Includes applications in employment law and discussion of interface of line and staff responsibilities in organization.

425 Labor Relations (4)

Prereq: MGT 300 or perm. Study of labor-management relationships, organization campaigns, contract negotiations, grievance procedures, arbitration, and mediation and conciliation. Case studies and class exercises used extensively.

430 Personnel Management Problems (4)

Prereq: 420. Advanced study of human resource management function of compensation administration. Topics include job analysis, job evaluation, compensation surveys, pay structure design and implementation, benefits administration, and incentive programs.

440 Organizational Behavior — Managing Change (4)

Prereq: MGT 300 or perm. Advanced study of human resource management functions of employee training and development and personnel research. Topics include new employee orientation, training needs analysis; training program design, implementation, and evaluation; applied personnel research methods; and costing human resource programs.

450 Recruitment, Selection, and Appraisal (4)

Prereq: MGT 300 or 200. Advanced study of human resource functions of recruitment, selection, and performance appraisal in organizations. Topics include recruitment planning and strategy, predictors for employee selection, criteria for evaluating job success, validation strategies, equal employment opportunity and affirmative action programs, and design and administration of employee performance appraisal systems.

460 Manpower Management (4)

Prereq: 420 and 425 or perm. Advanced integrative course serving as capstone in study of human resource management. Students expected to apply their knowledge of human resource strategies, techniques, and constraints through cases, experiential exercises, and other projects. Role of human resource information systems as basis for planning and policy decisions discussed.

491 Seminar (4)

Prereq: perm. Selected topics of current interest in human resource management.

493 Readings (1-5)

Prereq: perm. Readings on selected topics from human resource management literature. Topics selected by student in consultation with faculty member.

497 Independent Research (1-5)

Prereq: perm. Research involving some human resource management topic. Topic selection and study are under direction of faculty member.

HUMAN SERVICES TECHNOLOGY

The following courses for the A.A.S. program in human services technology are available only on the Chillicothe campus.

101 Principles of Behavior (5)

Discussion of basic principles of animal and human behavior with emphasis on operant and respondent conditioning. Lab designed to demonstrate these principles.

102 Introduction to Human Services Technology (3)

Comprehensive introduction to knowledge and skills required for successful human services work. Topics include history and issues in human services, philosophical models, methods of service delivery, professional roles, and others.

110 Human Services Agencies (3)

Prereq: 102 or perm. Survey of functions of various human service agencies and programs. Students will interact with professional staff from local programs and be familiarized with services, goals, and organizational structure of each agency or program.

125 Psychological Assessment (4)

Prereq: PSY 101. Introduction to various assessment techniques used in human services. Includes interviewing and case history development in addition to psychological testing. Students will learn values and limitations of different assessment approaches. Ethical considerations also discussed.

150 Behavior Management I (3)

Prereq: 101. Examines application of behavioral principles and techniques to various human problems. Emphasis on learning to objectively describe, measure, and analyze behavior data. Ethical issues in behavior management discussed.

151 Behavior Management II (4)

Prereq: 150. Continuation of 150, exploring additional applications of behavioral techniques in both individual and group settings. Practice provided in contingency contracting and designing token economy.

152 Behavior Management III (4)

Prereq: 151. Continuation of 151 with emphasis on specific behavioral techniques such as progressive relaxation training and bio-feedback. Discussion of cognitive methods of behavior change. Course also attempts to integrate use of behavioral techniques with other intervention approaches.

170 Group Dynamics I (4)

Prereq: 102 and perm. Explores theories and issues current in group dynamics. Provides exercises to demonstrate applications of various theoretical positions. Also discusses methods for implementing groups and outcome evaluation.

171 Group Dynamics II (3)

Prereq: 170. Continuation of 170 with emphasis on participation in variety of group exercises. Students involved both as participants and group leaders. Critical feedback and evaluation provided through video-taped group sessions.

200 Personal Management (3)

Prereq: 102. Examines management of one's own behavior and positive relationship with others in social context. Emphasis on empathy and understanding through literature and/or other modes of communication.

210 Practicum I (2)

Prereq: 110 and perm. Students will participate in 150 hrs of supervised field experience at local agency or institution. Provides opportunity to gain practical training and experience under guidance and supervision of professional agency staff.

211 Practicum Seminar I (1)

Opportunity for group discussion of special topics and problems related to student practicum experiences and professional development. Enrollment concurrent with 210.

220 Practicum II (2)

Prereq: 171 and 210. Provides additional opportunities to develop helping skills and to practice techniques learned in class. Students may opt for more intensive experiences at same agency as 210 or select another from those participating with HST program. 150 hrs required.

222 Practicum Seminar II (1)

Opportunity for group discussion of special topics and problems related to student practicum experiences and professional development. Enrollment concurrent with 220.

250 Practicum III (2)

Prereq: 220. Emphasis of final 150-hr practicum on continued skill development and broadening of experience. Students who have completed 210 and 220 at same agency expected to select another for final practicum.

255 Practicum Seminar III (1)

Opportunity for group discussion of special topics and problems related to student practicum experiences and professional development. Enrollment concurrent with 250.

275 Community Resources (3)

Prereq: perm. Topics include sources of funding, organizational structures, funding review process, and others. Emphasis given to actual preparation and writing of intra- and extra-organizational proposals and grants.

290 Special Problems (1-10, repeatable)

Prereq: perm. Provides opportunity for students to explore topics of interest on individual basis, or in structured courses developed as common interests arise. Additionally, credits may be awarded for advanced practicum experiences.

INDONESIAN

See Foreign Languages and Literatures.

INDUSTRIAL HYGIENE

(Major Code #3309)

The industrial hygiene program prepares individuals devoted to the recognition, evaluation, and control of those environmental factors or hazards arising in or from the workplace which may cause sickness, impaired health and well-being, or significant discomfort among workers.

Industrial hygienists are health professionals concerned with how noise, dust, vapors, and other hazards common to the workplace affect workers' health.

Graduates of the program may be employed directly by private laboratories, industrial firms, insurance companies, or governmental agencies or they may enter graduate programs in industrial hygiene, public health, or other health-related disciplines.

The curriculum is designed to provide a broad-based program within the College of Arts and Sciences and College of Engineering and Technology leading to a bachelor of science degree.

The student must complete the Arts and Sciences degree requirements for the bachelor of science degree and the industrial hygiene program requirements, consisting of IH 200, 400, and 401; CHEM 141, 142, 143, 301, 302, 303, 330, 351, 476, 483, 485, and 489; ISE 231, 304, 333, 336, 422, 448, and 451; ET 331; EG 101; INCO 103; ME 400; ZOOL 150, 300, and 345; MATH 263A, B, and C; MICRO 411 and 418; PHYS 251, 252, and 253; ENG 151 and 305; ECON 101; MGT 200; BUSL 370; and PSY 101.

The math, physics, English, economics, and psychology courses will apply to the Arts and Sciences degree requirements.

Students interested in the program should consult the Director, Industrial Hygiene Program, Chemistry Department, for advising and schedule planning.

200 Introduction to Industrial Hygiene and Occupational Safety and Health (1)

Prereq: industrial hygiene major or perm. (winter) Introduction to occupational safety and health and industrial hygiene including historical developments, health and safety program concepts, social and legislative requirements, professional relationships, and general introduction to concepts of recognition, evaluation, and control of exposures. 1 lec.

400 Industrial Hygiene Air Sampling (3)

Prereq: jr rank in industrial hygiene or perm. (spring) Lectures and lab to introduce field sampling and lab instrumentation and analytical methods common to industrial hygiene. Students required to interpret readings, analyze samples, and prepare appropriate reports. 2 lec, 3 lab.

401 Hazardous and Flammable Materials for Industrial Hygiene (3)

Prereq: sr rank in industrial hygiene or perm. (spring) Lectures on gases, vapors, dusts, liquids, and solids and their physical and chemical characteristics: Emphasis on sampling, evaluation, and control methods. Technical reports required, including design requirements as specified by regulatory agencies. 3 lec.

INDUSTRIAL TECHNOLOGY

The program requirements for a B.S. degree in industrial technology are described in the *College of Engineering and Technology* section of this catalog. A teaching option is available for industrial technology majors.

Those wishing to major in industrial arts education should refer to the *College of Education* section of this catalog.

80 Driver Education (2)

For novice drivers. Credit and points not counted toward degree. 2 lec, 1 lab. Fee required; see qtr Schedule of Classes.

101 Engineering Drawing (3)

(2A)

Beginning course for students of engineering and technology and related fields; basic techniques, processes and standards, multi-view drawing, freehand drafting, fundamentals of dimensioning, section views, sectional assemblies, and computer graphics. 2 lec, 3 lab.

102 Engineering Drawing (3)

Prereq: 101. Basic engineering drawing: pictorial drawing, free-hand drawing, developments and intersections, dimensioning, working drawings, elementary design problems. 5 lec.

104 Architectural Drawing (5)

Provides opportunity to learn basic techniques used in architectural drawing such as use of instruments, orthographic projection, floor plans, elevations, sections.

105 Architectural Drawing (5)

Prereq: 104 or perm. Continuation of 104, providing opportunity to learn pictorial drawing techniques such as isometric drawing, perspective drawing, and rendering techniques.

109 Crafts (2)

Working with leather, art metal, enameling, and plastics. Open to any student. 4 lab.

115 Metal Fabrication (4)

Production practice, including cutting, forming, and joining of metals. 1 lec, 6 lab.

117 Engineering Metals — Machining (3)

Prereq: industrial technology or engineering major. Practice directed toward learning capability of various metal cutting, forming, and joining machines. 1 lec, 4 lab.

121 Descriptive Geometry (3)

Prereq: 101 or perm. Graphical solutions of problems relating to points, lines, planes, and solids. Space visualization pertaining to intersections of planes and solids. Exercise sheets and practical applications. 5 lec.

122 Nomography (2)

Prereq: 3 yrs h.s. math or perm. Fundamentals of using conversion scales, alignment diagrams, and proportional charts in graphical solution of equations. 3 lec.

201 Computer Graphics (3)

Prereq: 101, soph rank. Introduction to computer-aided drafting, using 2-dimensional software package.

220 Small Engines (3)

Assembly, adjustment, and gauging procedures, as applied to small 2-cycle and 4-cycle gasoline engines. 1 lec, 4 lab.

221 Power Transmission (3)

Prereq: 220. Practice with common power transmission units, including study of transmission efficiency and adjustments affecting operational characteristics. 4 lab.

244 Graphic Processes (3)

Production methods applied to letterpress and offset process printing. 1 lec, 4 lab.

250 Wood Industry (3)

Woodworking procedures and technology, including machine operation. 1 lec, 4 lab.

260 Line Supervision (3)

Prereq: 115. Working relationships between personnel involved in production areas of manufacturing considered, including qualifications and characteristics expected for various positions. Case studies provide examples of typical positions and responsibilities available to graduates in industrial technology. 3 lec.

301 Ceramic Production (3)

Ceramic materials, with emphasis on production processes. 1 lec, 4 lab.

302 Vitreous Materials (2)

Prereq: 301. Application of industrial ceramic products to problems associated with manufacturing. 4 lab.

308 Plastics (4)

Applications involving typical materials and forming techniques in production of plastic objects. Study of industry, its basis, and trends. 1 lec, 4 lab.

309 Plastics Tooling (2)

Prereq: 308. Study of tooling for plastics forming processes such as extrusion, injection molding, and compression molding. 1 lec, 2 lab.

310 Metal Casting (5)

Prereq: 101, perm. Foundry practice extending from pattern design through production of finished casting. 1 lec, 4 lab.

311 Welding (2)

Prereq: 115. Varied types of welds, using arc, shielded arc, oxy-acetylene, and spot welders. Analysis of results based upon testing. 4 lab.

312 Metals Production (3)

Prereq: 117 or perm. Advanced practice of machining techniques organized to illustrate applications of quantity and quality control. 1 lec, 4 lab.

315 Technical Drawing (3)

Prereq: 101, 102, 117, or perm. Standard and basic drawing representations as applied to industrial products and processes with special emphasis on detail and assembly drawing. 6 lec.

318 Numerical Control (3)

Prereq: 117 or perm. Metal machining extending from planning of work program through production of finished article. 2 lec, 2 lab.

320 Hydraulic Controls (3)

Prereq: PHYS 201. Application of hydraulic principles to common industrial utilizations for power transmission and mechanism control. Emphasis on study of hardware and circuitry. 1 lec, 4 lab.

321 Pneumatic Circuits (3)

Prereq: 320. Components and circuits utilizing compressed air for power and control systems. 1 lec, 4 lab.

332 Electronics (5)

Prereq: jr or perm. Experimental activity to develop proficiency in utilizing test instruments; learning characteristics of components commonly employed in simple circuits. 2 lec, 6 lab.

341 Process Photography (3)

Prereq: 244 or perm. Applications of photography, with emphasis upon standardization of quality control, from exposure through printing by photo-offset and screen process methods. 1 lec, 4 lab.

347 Plastics Process (3)

Prereq: 308. Typical industrial techniques used to ensure quality in processing of manufactured plastics end products. 1 lec, 4 lab.

350 Furniture Production (5)

Prereq: 101, 250. Designing and constructing major furniture project involving use of extensive hand tool and machine techniques to acquire knowledge of how these processes are done by industrial furniture manufacturers.

351 Jigs and Fixtures (3)

Prereq: 101, 117, or perm. Planning and constructing supplemental devices aimed toward increasing production quantity and quality in industry. 1 lec, 4 lab.

360 Manufacturing (3)

Prereq: jr rank. Manufacturing process and its integration into public school industrial arts curriculum.

361 Product Design (2)

Prereq: 101 or perm. Design principles applied through development of products. 4 lab.

363 Quality Control (2)

Prereq: jr or perm. Study and application of quality control principles and practices, using products manufactured within other industrial technology classes as illustrative examples. 2 lec.

370J Public and Professional Writing (5) (1J)

Prereq: jr rank. Features preparation, organization, writing, and editing for variety of audiences covering wide range of professional writing topics. Satisfies 5 hrs of jr-level English composition requirement.

380 Driver Safety (5)

Prereq: EDCI 275 or PSY 275. Current traffic conditions and regulations affecting driving as preparation to becoming instructors in driver education. Lab involves working with novice driver. 4 lec, 2 lab.

381 Traffic Safety (3)

Prereq: 380. Organization and administration of driver education, including study of related attitudes and methods practiced in existing programs. Practice instruction included. 2 lec, 2 lab.

390 Materials (3)

Prereq: 23 hrs. Sources, manufacture, and applications of common materials not given more extensive coverage within other departmental courses. 3 lec.

391 Elementary Industrial Arts (2)

Prereq: basic experience with common tools or perm. Planning and construction of projects appropriate for elementary education, recreation, or personal development. 4 lab.

395 Co-op Work Study (5, max 15)

Prereq: perm. Work-study participation in established industrial training programs. Credit dependent upon advance registration and acceptance by approved companies participating in program.

396 Intern Supervision (3)

Prereq: 395 or perm. Practice supervision simulating foremanship level for students involved in production activity within other departmental courses. 1 lec, lab arranged.

435 Machine Control (3)

Prereq: 332. Combinations of basic electronic circuitry in more complex arrangements commonly employed for machine control. Emphasis upon adjustment and correction of malfunctioning controls. 1 lec, 4 lab.

436 Electronic Applications (3)

Prereq: 435 or perm. Advanced experimental work on individual problems, as approved by instructor, for extension of knowledge from previous courses. 6 lab.

443 Advanced Graphics (2, max 4)

Prereq: 244. Problem solving in graphic reproductions as means of depth study in specific phases of this area. 4 lab.

452 Computer-Aided Manufacturing (CAM) (4)

Prereq: CS 230, sr rank, or perm. Applications of computer and micro-processor in automation of manufacturing process. Problem-solving experiences using basic language lead to final design project that will be used in product manufacturing courses. 1 lec, 6 lab.

462 Product Manufacture (5)

Prereq: 452 and sr rank, or perm. Development of entire plan for manufacturing products. Plan to include sequence of operations, supply and work flow, personnel requirements, production rate, and cost predictions. 6 lab.

465A Workshop in Industrial Education (1-6)

Special workshop for in-service training of industrial arts teachers. (electricity).

465B Workshop in Industrial Education (1-6)

Special workshop for in-service training of industrial arts teachers. (electronics).

465C Workshop in Industrial Education (1-6)

Special workshop for in-service training of industrial arts teachers. (metals).

465D Workshop in Industrial Education (1-6)

Special workshop for in-service training of industrial arts teachers. (woods).

465E Workshop in Industrial Education (1-6)

Special workshop for in-service training of industrial arts teachers. (plastics).

465F Workshop in Industrial Education (1-6)

Special workshop for in-service training of industrial arts teachers. (graphic arts).

465G Workshop in Industrial Education (1-6)

Special workshop for in-service training of industrial arts teachers. (pneumatics).

465H Workshop in Industrial Education (1-6)

Special workshop for in-service training of industrial arts teachers. (hydraulics).

465I Workshop in Industrial Education (1-6)

Special workshop for in-service training of industrial arts teachers. (power).

465K Workshop in Industrial Education (1-6)

Special workshop for in-service training of industrial arts teachers. (elementary).

465L Workshop in Industrial Education (1-6)

Special workshop for in-service training of industrial arts teachers. (administration and supervision).

465M Workshop in Industrial Education (1-6)

Special workshop for in-service training of industrial arts teachers. (curriculum development).

465N Workshop in Industrial Education (1-6)

Special workshop for in-service training of industrial arts teachers. (facilities).

465O Workshop in Industrial Education (1-6)

Special workshop for in-service training of industrial arts teachers. (innovative programs).

465P Workshop in Industrial Education (1-6)

Special workshop for in-service training of industrial arts teachers. (ceramics).

465Q Workshop in Industrial Education (1-6)

Special workshop for in-service training of industrial arts teachers. (crafts).

470 Intern Teaching (3)

Prereq: EDSE 351, 12 hrs. (winter) Presenting technical and related material in industrial arts classes. 2 lec, lab arranged.

471 Administration of Industrial Education (3)

Prereq: 12 hrs. (fall) Types of organization, lab planning, equipment selection, and accounting systems found in vocational and nonvocational industrial education. 3 lec.

472 Contemporary Programs (3)

Prereq: 12 hrs. (spring) Development and application of industrial arts programs. 1 lec, 4 lab.

483 Safety Programs (4)

Prereq: sr or perm. Organization patterns of safety programs and how they are applied to industrial, educational, and traffic safety situations.

484A Maintenance Systems (3)

Prereq: 12 hrs. Maintenance systems currently utilized, with consideration of where and how each may be installed. Covers material related to industrial maintenance systems. 3 lec.

484B Maintenance Systems (3)

Prereq: 12 hrs. Maintenance systems currently utilized, with consideration of where and how each may be installed. Covers material related to industrial arts labs. 3 lec.

490 Special Problems (1-5, max 5)

Prereq: sr rank, perm. In-depth study in related technical areas.

Industrial Technology (A.A.S.-Design)

The following courses (designated DTCH) for the design option of the A.A.S. program in industrial technology are available only on the Lancaster campus.

100 Introduction to Industrial Technology (3)

Overview of design and manufacturing options. Topics include machining, welding, steel production, quality control, interrelation of processes, design concepts, materials, mechanisms, and structures. Plant tours, lab work, and projects involved. Recommended for students having little or no background in mechanical design or manufacturing. 2 lec, 2 lab.

150 Detail and Assembly Drawing (3)

Prereq: IT 102, 216, or perm. Preparation of detail and assembly drawings from layouts and design sketches. Determination of tolerances, consideration of manufacturing processes on dimensioning, use of reference materials. 6 lab.

200 Engineering Mechanics I (4)

Prereq: MATH 118 or perm. Basic statics and dynamics. Coverage includes vectors, Newton's laws, trusses, frames and machines, friction, moments of inertia, particle kinematics and kinetics, work-energy, impulse-momentum. 4 lec.

210 Engineering Mechanics II (4)

Prereq: 200 or perm. Introduction to strength of materials. Axial, torsional, and flexural loadings; plane stresses; beams; columns; deflections; statically indeterminate systems; testing methods. 3 lec, 2 lab.

220 Machine Design (3)

Prereq: 210 or perm. Design of machine elements. Shafts, brakes, clutches, belts, couplings, bearings, springs, gears, fasteners, splines, and keys. Stresses in machine parts, materials applications. 3 lec.

230 Tool Design (4)

Prereq: 150; IT 115, 216; or perm. Basic jig and fixture design. Relation to manufacturing processes, material requirements, introduction to die design, gauging, and cutting tools. Design projects. Use of standards. 1 lec, 6 lab.

240 Mechanisms (4)

Prereq: 200, IT 121, or perm. Design and analysis of simple mechanisms. Kinematics and kinetics of rigid bodies, graphical analysis of force, velocity and acceleration problems, linkages, instantaneous centers, gear trains, cams, rolling contact. 1 lec, 6 lab.

250 Structural Design (4)

Prereq: 150, 210, or perm. Design of structural components in buildings. Foundations, connections, materials selection, use of industry standards. 1 lec, 6 lab.

299 Special Problems (1-3, max 6)

Prereq: perm. Individual projects or internship experiences under direction of faculty member in design option.

Industrial Technology (A.A.S.-Manufacturing)

The following courses (designated MTCH) for the manufacturing option of the A.A.S. program in industrial technology are available only on the Lancaster campus.

220 Basic Hydraulics (3)

Prereq: PHYS 201. Application of hydraulic principles to common industrial control circuits. Emphasis on maintenance of hardware and circuitry. Field trips part of lab activity. 1 lec, 4 lab.

221 Basic Pneumatics (3)

Prereq: 220. Application of compressed air control systems to common industrial control circuits. Emphasis on maintenance of hardware and circuitry. 1 lec, 4 lab.

261 Manufacturing I (Processes) (3)

Comprehensive study of machine processes used in manufacturing with regard to their selection and plant layout requirements. Field trips part of lab activity. 2 lec, 2 lab.

262 Manufacturing II (Inventory, Handling, Costing) (3)

Prereq: 261 or perm. Inventory control, materials handling and production costs, storing and handling of materials before, during, and after manufacture. Field trips part of lab activity. 2 lec, 2 lab.

263 Manufacturing III (Quality Control) (3)

Analysis of basic principles of quality control. Includes statistical aspects of tolerance, basic concepts of probability, frequency distribution, sampling inspection, charts and gauges related to inspection. Field trips part of lab activity. 2 lec, 2 lab.

264 Manufacturing IV (Scheduling) (3)

Various established techniques of scheduling, analyzing, and improving production operations. Detailed study of applications of CPM scheduling. Introduction of PERT. Field trips part of lab activity. 2 lec, 2 lab.

290 Materials (3)

Prereq: CHEM 121 or perm. Applications of materials used in manufacturing and design. Metallic structure, alloys; heat treating; comparative properties of metals, plastics, and ceramics; processing effects; testing methods; coatings, lubricants, etc. 2 lec, 2 lab.

299 Special Problems (1-3, max 9)

Prereq: perm. Individual projects or internship experiences under supervision of faculty member in manufacturing option.

INTERNATIONAL STUDIES

Major in International Studies

(Major Code #4205)

Requirements for the A.B. degree major program in international studies consist of a minimum of 52 hours chosen from areas I and II as follows: *AREA I, International Studies* — a minimum of four courses, two on relations among nations and two on comparative studies. *AREA II, World Regions* — a minimum of 36 hours of coursework concerning one of the following world regions: Africa, Asia, Latin America, Soviet Union and Eastern Europe, or Western Europe. A list of courses which may be used to complete these requirements may be obtained from the Center for International Studies or the College of Arts and Sciences.

Other requirements: (1) No more than 24 of the credit hours completed in pursuit of the 52 required for the major may be in *any one department**. One course must be chosen from at least three departments with at least one course in fine arts or humanities. (2) Courses used to satisfy general Arts and Sciences requirements for the A.B. degree cannot be used to meet major requirements and vice versa. (3) The language chosen to fulfill the A.B.-degree language requirement must be appropriate to the area of specialization chosen from AREA II of the major requirements. (4) The program requires the completion of ten hours of English which, except for ENG 150, will apply to the humanities area requirement.

*Art history, comparative arts, and dance count as one department for distribution requirements.

International Studies Certificate

The Center for International Studies offers a certificate in international studies as a supplement to undergraduate major programs other than the major in international studies. The student may concentrate on Asia, Africa, or Latin America.

The requirements for the Latin American certificate are: (1) six courses relating to Latin America, (2) a study of a language relevant to the student's program through the intermediate level, and (3) a grade-point average of 2.50 in all courses taken toward the certificate. The requirements for the Asian or African certificate are: (1) nine courses which may be chosen in either of these two options: *Option A* — Three of the courses must be in an African or Asian language and the other six must relate to Africa or Asia; *Option B* — The nine courses must relate to Africa or Asia but with no language requirement; (2) a grade-point average of 2.50 in all courses taken toward the certificate.

The certificate is awarded upon graduation from Ohio University. Students seeking the certificate must register with the undergraduate certificate advisor in their area studies program.

For further information about the Center for International Studies, Asian, African, and Latin American languages, and other international activities, see the *Center for International Studies* section of this catalog.

The Center for International Studies is responsible for the following interdisciplinary courses.

103 Modern Asia (5) (2T)

Introduction to history, cultures, and current problems of civilizations of Asia. Interdisciplinary survey dealing with China, Japan, India, and Southeast Asia (Burma, Thailand, Vietnam, Cambodia, Laos, Malaysia, Singapore, Indonesia, and Philippines).

113 Modern Africa (4) (2T)

Interdisciplinary introductory survey of Africa, its culture, history, and modern development. Disciplines included: anthropology, art, dance, economics, education, geography, history, linguistics, literature, and political science.

121 Interdisciplinary Survey of Latin America (4) (2T)

Introduction to Latin America through geography, politics, sociology, economics, literature, and art. Special emphasis given to 20th-century issues, problems, and developments.

INTERPERSONAL COMMUNICATION

101 Fundamentals of Human Communication (3) (2H)

Introductory analysis of oral communication in human relationships with focus on variety of contexts including: dyadic, small group, and public communication experiences. Serves as survey of human communication processes. Mass lec.

103 Fundamentals of Public Speaking (4) (2H)

Prereq: 101 required for INCO majors only. Principles of public speaking, practice in presenting informative and persuasive speeches with emphasis on communicative process.

104 Listening (2)

Improvement of listening skills through intensive practice.

105 Introduction to Mass Communication (4) (2S)

Development, structure, functions, processes, control, and effects of mass media. 4 lec. Identical to JOUR 105 and TCOM 105.

107 Introduction to Verbal Language Behavior (2) (2S)

Fundamental linguistic theory of verbal language production in message generation, oral, vocal, and verbal. International Phonetic Alphabet studied in relation to speech, articulation, and pronunciation.

205 Group Discussion (4) (2S)

Prereq: 101, 103. Study of structure and internal dynamics of small groups, nature and functions of leadership and group participation, problem solving, and decision making; frequent participation in group discussion activities.

206 Communication in Interpersonal Relationships (4) (2S)

Prereq: 101, 103. Provides maximum experience in study of communication in social interaction. Exploration of communication variables, and skill development in message generation in 1-to-1 informal settings.

210 Parliamentary Procedure (2)

Non-lec, small-group work in theory and procedures by which organizations are run according to rules of order.

215 Argumentation and Debate (4)

Basic principles of argumentative discourse including concepts of presumption, burden of proof, rhetorical forms of reasoning, and evidence. Practice in applying these principles.

217A Forensic Workshop — Debate (1-6)

Prereq: perm. Intensive work in Intercollegiate Forensics Program. Students prepare for debate on contemporary issues. For credit, students must participate in 1 intercollegiate contest. (3 hrs per qtr possible up to total of 12 hrs credit, no grade)

217B Forensic Workshop — Individual Events (1-6)

Prereq: perm, participation in O.U. Forensic Program. Students prepare for community appearances and tournament competition in oral interpretation, persuasion, informative, rhetorical criticism, extemporaneous, impromptu, and after-dinner speaking. For credit, students must prepare 2 events for at least 1 collegiate tournament. (3 hrs per qtr possible up to total of 12 hrs credit, no grade)

220 Oral Interpretation of Literature (4)

Techniques of oral interpretation and development of adequate intellectual and emotional responsiveness to meaning of literature.

234 Introduction to Communication Theory (5) (2S)

Prereq: soph rank, 101 and 103. Survey of selected humanistic and scientific approaches to communication studies. Emphasis on philosophical bases of communication theory.

245 Introduction to Organizational Communication (4) (2S)

Prereq: 234. Analysis of traditional and contemporary theories of communication in context of modern complex organizations (government, industry, education, etc.). Consideration and explication of such pertinent concepts and variables as message, channel, networks, information, information flow, communication climate, communication audit, etc.

301 Empirical Research Applications in Communication (5)

Prereq: MATH 113. Provides undergraduates with principles and basic skills necessary to criticize research literature; develops minimal proficiencies in structuring designs basic to descriptive and experimental studies, including data collection, analysis, and presentation techniques in communication research.

342 Communication and Persuasion (4)

Process of communication and attitude change, survey of general theories and typical research, analysis of contemporary persuasion problems.

353A History and Criticism of Courtroom Oratory (3) (2S)

Famous cases and methods of communication of masters of courtroom and judicial oratory. Cases, trials including Cicero, Strassford, Charles I, Erskine, Hastings, Marshall, Webster, Darrow, Sacco-Vanzetti.

353B History and Criticism of Political Oratory (3) (2S)

Rhetorical techniques found in political discourse are examined. Topics covered include symbolic politics, the place of myth in politics, and the political elements of film, literature, and television.

353C History and Criticism of 20th Century Oratory (3) (2S)

Methods of communication of masters of period. Figures: Hitler, Mussolini, Lenin, Wilson, Churchill, Roosevelt, Kennedy, King. Movements: rhetoric of revolution, nationalism, fascism, socialism, communism, republicanism.

353D History and Criticism of Black Oratory (3)

Methods of communication and rhetorical theories of masters of black oratory. Figures drawn primarily from 20th-century black speaking.

404 Principles and Techniques of Interviewing (4)

Prereq: 85 hrs. Methods used in 2-party, face-to-face oral communicative situations commonly encountered in organizational and professional environments. Intensive practice through role-playing and real-life interviews in and out of class, emphasizing skills involved in giving and getting information, persuasion, and job-employment situations.

405 Principles of Conference Leadership (4)

Prereq: 85 hrs, 205. Theoretical and methodological approaches to principles of group and conference leadership. Emphasis on leadership methods and skills as they apply to group and conference situations.

406 Gender and Communication (5)

Prereq: 101, 206. Explores variations in communicative behaviors related to biological sex and psychological gender. Examines female and male communication in intrapersonal, interpersonal, small group, public, and organizational settings.

421 Instructional Training and Development in Communication (5)

Provides upper-level undergrad and grad preprofessional and professional training in development of interpersonal communication as human resource. Emphasis on application of communication skills necessary in organizational construct; education, business, professions, and governmental service.

425A Direction of Forensic Programs in Secondary Teaching (3)

Curriculum, coaching, budgeting, judging, public relations, professionalism, and tournament management. Practical application in high school forensics programs.

425B Direction of Forensic Programs in College Teaching (3)

Study in curriculum, coaching, budgeting, judging, public relations, professionalism, and tournament management. Practical application in university forensics programs.

433 Applications of General Semantics (4)

Chief formulations from general semantics and their applications to field of communication.

435 Theories of Argument (3)

Relations between formal logic and rhetorical systems of argument; intensive study of fallacies and of experimental findings related to study of argument.

445 Practicum in Organizational Communication (5)

Prereq: 130 hrs, 245, and 301. Message generation and analysis in simulated organizational environment; simulation of specific communication situations and problems student may encounter in professional career; opportunity to apply skills and theories.

446 Communication and the Campaign (5)

Prereq: 342. Theory and practice of persuasion and management in campaign situations (political, religious, information, fundraising, advertising, etc.). Students may participate in local, state, or national campaigns, or do research paper in depth.

448 Cross-Cultural Communication (4)

Prereq: 85 hrs. Analysis of processes and problems of communication as affected by national cultures; effects of differences in language, values, meaning, perception, and thought.

450 Introduction to Rhetorical Theory (3)

Prereq: 103 and 215 or perm. Ancient and modern rhetorical communicative concepts and theories.

452 Psychology of Speech (4)

Prereq: 85 hrs. Psychological principles active in communication such as concept-reference, meaning, vocal, verbal and nonverbal cues. Neurophysiological mechanism and socio-psychological-linguistic dimensions of speech examined.

458 Responsibilities and Freedom of Speech in Communication (4)

Prereq: 85 hrs. Ethical and rhetorical implications of constitutional guarantees on political, social, and religious speech; analysis of effects of famous legal cases on freedom of speech.

465 Field Research Methodologies in Communication (5)

Prereq: 301 or perm. Development of communication methods such as content analysis, participant observations, Q-analysis, questionnaire design, sampling procedures, case studies, and unobtrusive measures.

496 Extended Instructional Seminar (1-16)

Formalized extended learning special topics seminar. Not intended for regular student. No graded evaluation; awards credit-noncredit.

497 Internship (1-15)

Prereq: perm. Systematic, supervised practical training and experience for undergraduate students in selected professional environments.

498 Independent Study (2-4, max 12)

Prereq: written proposal, perm. May be repeated for credit.

ITALIAN

See Foreign Languages and Literatures.

JAPANESE

See Foreign Languages and Literatures.

JOURNALISM

105 Introduction to Mass Communications (4) (2S)

All forms of mass communication including newspapers, magazines, radio-television, book publishing, public relations, advertising, and photojournalism. Begins with analysis of communication process and ends with media career opportunities. Same as TCOM 105 and INCO 105.

189 Journalism Workshop (1-4)

Workshop on selected topics of journalism and mass communication. May be repeated to total 6 hrs of credit.

221 Graphics of Communication (5)

Prereq: English Proficiency Test, majors only. Creative and practical aspects of typography, layout, and design of printed communication.

231 News Reporting (4)

Prereq: typing proficiency and passage of English Proficiency Test. Methods of gathering and evaluating news and writing typical news stories. Practice work covering assignments and preparing copy.

250 Advertising Principles (5)

Prereq: English Proficiency Test, advertising and PR majors, or perm. Major factors in development of advertising programs.

311 History of American Journalism (4)

Prereq: English Proficiency Test, major, or perm. Development of newspaper, magazine, and broadcast journalism from colonial period to present. Social, political, economic, and mechanical aspects.

321 Print Advertising and Layout (4)

Prereq: English Proficiency Test, 221, 231, 250, and major, or perm. See title.

323 Advertising Practice (2)

Prereq: English Proficiency Test, 321, perm. Lab work in preparing advertising for local advertisers.

325 Photojournalism (3)

Prereq: English Proficiency Test, 231, or perm. Basic principles and practices of photojournalism for newspapers, magazines, and television. Includes consideration of roles of photographers and picture editors in communications and their relationships with other members of editorial team and mechanical departments of publications. Students shoot, process, and print pictures on assignment.

326 Advanced Photojournalism (3)

Prereq: English Proficiency Test, 325, portfolio review, and perm. See title.

327 Color Photography (3)

Prereq: 326 and perm. Advanced course in photojournalism designed to give students working knowledge of color photography and processing.

331 Reporting Contemporary Issues (3)

Prereq: English Proficiency Test, 231, jr or sr rank. Research, reading, and speech reporting on current social problems. Emphasis on intelligent understanding and ability to report in depth for mass audience.

332 Reporting Practice (2)

Prereq: English Proficiency Test, 231, perm. Assignments at *Athens Messenger* in city, sports, and women's desk reporting, along with features.

332B Reporting Practice (2)

Prereq: English Proficiency Test, 231, and perm. Assignments at Dept for Afro-American Studies in news and feature reporting about black community.

333 News Editing (4)

Prereq: C or better in 231, English Proficiency Test. Copyreading, headline writing, news selection, and layout of news pages.

334 Editing Practice (2)

Prereq: English Proficiency Test, 333, perm. Copyreading on *Athens Messenger*. Handling of local correspondence, wire copy, and working out make-up problems.

335 Picture Editing (3)

Prereq: English Proficiency Test, 333, or perm. Principles and practices of picture editing. Includes consideration of picture sources, assignment, and handling; photographic technique and esthetics; legal and ethical factors; visual idiosyncrasies of various media.

336 Advanced Picture Editing (3)

Prereq: 325, 335, and perm. Advanced course in picture editing designed to equip students with basic knowledge and working skills necessary for employment on newspaper or magazine picture desk.

351 News in Broadcasting (5)

Prereq: English Proficiency Test, 231, and 333, or perm. News programming, practices, and problems in broadcasting. Preparation of news reports for broadcasts.

353 Broadcast News Practice (2)

Prereq: English Proficiency Test, 351, or perm. Preparation of news for broadcast. Students serve as assistants in newsroom of University's broadcasting stations or, by special arrangement and perm, in other stations.

362 Community Newspapers (3)

Prereq: English Proficiency Test, 333, or perm. Editorial and business practices of suburban weeklies and dailies.

363 Reviewing and Criticism (3)

Prereq: English Proficiency Test, 231, and major, or perm. Written criticism of fine and popular arts. Special role of critic who serves both as reporter and evaluator of artistic works for lay audience.

370 Media Relations and Publicity (3)

Prereq: English Proficiency Test, 221, 231, 333: all C or better. Focus on publicity function of public relations and to skills in both public relations writing and media contact.

375 Advertising Media Planning and Buying (4)

Prereq: 250, jr rank or perm. Strategy, techniques, and problems of planning and buying media. Learning to buy space and time effectively and economically. Learning use of syndicated sources of media information.

410 Information Collection and Analysis in Mass Communication (3)

Prereq: 231, 333, basic statistics (PSY 121, SOC 350, or INCO 301). Journalistic and social-science interviewing, basic statistical analysis, and use of libraries, government documents, and computerized data bases. Prepares mass communicators to conduct research and to assess and use audience research in media-related decision-making.

411 Newspaper and Communications Law (4)

Prereq: English Proficiency Test, C or better in 333. Principles and case studies in communications law, constitutional guarantees, libel, privacy, contempt, privilege, copyright and government regulatory agencies.

412 Ethics, Mass Media, and Society (3)

Prereq: English Proficiency Test, C or better in 333 and 411, or perm. Social responsibility of journalistic or other mass communicator. Professional codes, responsibility of media for social change, reaction to political and economic pressures.

421 Graphic Production Processes (5)

Prereq: English Proficiency Test, 221, and perm. Advanced study of all processes for reproducing printed communication. Theory and lab.

422 Advertising Production (3)

Prereq: English Proficiency Test, 221, 321, or perm. Techniques and problems in methods of advertising production.

430 Magazine Editing and Production (4)

Prereq: English Proficiency Test, 221, 333. Theory and techniques of magazine editing and production, including analysis of magazine industry and of specific magazines and audiences they serve. Editorial objectives and formulas, issue planning, article selection, layout, illustration, typography, printing, and distribution. Magazine project required.

431 Magazine Editing and Production Practice (3)

Prereq: English Proficiency Test, 430. Practice course on E.W. Scripps School of Journalism's quarterly lab magazine. Each student assigned specific responsibilities in magazine editing, production, advertising, and circulation.

432 Specialized Magazines (3)

Prereq: English Proficiency Test, sr rank, or perm. Study in depth of professional, business, industrial, learned, or other specialized magazines. Consideration of all types of publishing problems, usually as case studies.

441J Magazine Feature Writing (4) (1J)

Prereq: English Proficiency Test, 231 and 333, 15 hrs English, or perm. Writing and marketing factual magazine feature articles of various types. Finding subjects, securing photographs, writing articles, and surveying markets.

442 Advance Magazine Feature Writing (3)

Prereq: English Proficiency Test, 441. Writing and marketing magazine articles. Emphasis on specialized markets.

450 Advertising Copy Writing (3)

Prereq: English Proficiency Test, 221, 231, 250, and advertising or PR majors, or perm. Effective persuasion in all media.

452 TV Newsfilm Production and Editing (3)

Prereq: English Proficiency Test, 351, or perm. Principles and practices of TV newsfilm production and editing. Same as TCOM 452.

455 Seminar in Broadcast News (3)

Prereq: English Proficiency Test, perm. Discussion of problems — operational, social, economic, legal, and ethical — faced by broadcasters reporting public affairs.

458 TV News Practicum (4)

Practicum in preparation and presentation of TV newscast. Students select news material including video, format, and script for newscast, then deliver on air. Students will rotate through various newsroom positions during qtr.

459 Advanced TV News Practicum (3)

Advanced practicum in preparation and presentation of TV newscast. Students involved in selecting, editing, scripting and formatting for on-air newscasts. Students also appear on air and assume management responsibilities.

461 Specialized Journalism (3)

Prereq: English Proficiency Test, sr rank, and perm. Seminar approach to individual study of journalistic areas of special interest to individual students.

462 Internship (3)

Prereq: English Proficiency Test, perm before beginning internship. Conference course for students who have completed internship with approved organization. Student will submit comprehensive report analyzing internship experience.

464 Reporting of Public Affairs (3)

Prereq: English Proficiency Test, 333, sr rank, major, or perm. Problems of preparing in-depth, interpretive, and analytical reports on public affairs for mass media, with practice in writing such reports. Focus mostly on contemporary controversial issues.

465 The Editorial Page (3)

Prereq: English Proficiency Test, 333, sr rank, major, or perm. Editorial page in opinion formation. Problems of content selection and presentation. Extensive writing of analytical and persuasive editorials and interpretive articles in depth.

466 International Communications (5)

Prereq: English Proficiency Test, sr rank, and major, or perm. Development and operations of world mass communication channels and agencies. Comparative analysis of media, media practices, and flow of news throughout world. Relation of communication practices to international affairs and understanding.

467 Foreign Correspondence (3)

Prereq: English Proficiency Test, sr rank, and 466, or perm. Role of foreign correspondent in news-gathering. History, scope, techniques.

471 Public Relations Principles (5)

Prereq: English Proficiency Test, 333, sr rank, and PR major or perm. Public relations planning and techniques; selected communication studies and theories. Polling, defining objectives, and analysis of public relations messages.

472 Advanced Public Relations (4)

Prereq: English Proficiency Test, 471, or perm. Planning public relations programs and projects, including selection of audiences, messages, and media, and evaluation of effects. Project in area of student's interest.

475 Advanced Advertising Media Planning and Buying (4)

Prereq: 250, 375, jr. rank. Media theories appropriate in specific client advertising situations. Use of computer software for solving media problems. Review, creation and testing of quantitative and qualitative media models, advanced work in media objectives, strategy, tests, and execution of media plans and evaluation.

476 Advertising Research (4)

Prereq: 250, 333, sr rank. Original research in advertising, research methods and procedures, and syndicated/secondary research. Exploration and use of computing center to complete advertising research project.

477 Media Sales and Promotion Management (4)

Prereq: 250, 321, 482. Overview and professional projects concerning media sales and promotion management. Development of sales promotion plan and professional advertising sales presentations.

481 Newspaper Management (3)

Prereq: English Proficiency Test, 333. Problems in publishing affecting all departments.

482 Radio-Television Advertising and Management (4)

Prereq: English Proficiency Test, 221, 231, and 250, or perm. See title.

484 Supervising School Publications (4)

Prereq: 12 hrs or perm. Conference course for prospective advisors of school newspapers, yearbooks, magazines, and other publications. Purposes and functions, legal aspects, staff selection, content, copy, layout, production, printing, advertising, photography, business.

485 Journalism in the Secondary School Curriculum (4)

Prereq: 9 hrs of journalism. Intensive study and analysis of appropriate content for high school journalism courses. Planning course outlines and curricula.

486 Advertising Campaigns (4)

Prereq: English Proficiency Test, 14 hrs advertising, advertising or PR major, and perm. Capstone course in advertising sequence to provide thorough understanding of basic elements of advertising campaigns. Includes creation of campaign.

489 Journalism Workshop (1-4)

Selected topics of journalism and mass communication, including newspapers, yearbooks, photojournalism, advertising, magazines, public relations, and publications advising. May be repeated to total 10 hrs of credit.

490 Independent Study (1-4)

Prereq: written proposal and perm. See title. May be repeated to 15 hrs credit.

491 Research in Journalism and Communications (1-15)

Prereq: perm.

492 Seminar (1-4)

Prereq: 333, sr rank. Selected topics of current significance. May be repeated with different topics to 12 hrs credit.

LATIN

See Foreign Languages and Literatures.

LATIN AMERICAN STUDIES

See International Studies.

LAW ENFORCEMENT TECHNOLOGY

The following courses for the A.A.S. program in law enforcement technology are available only on the Chillicothe campus.

100 Introduction to Law Enforcement Technology (3)

Philosophy and history of law enforcement; overview of crime and police problems; organization and jurisdiction of local, state, and federal law enforcement agencies; survey of professional career opportunities and qualifications required.

110 Police Role in Crime and Delinquency (3)

Extent and distribution of crime and delinquency, with special emphasis on basic factors and conditions contributing to problem; some case study and evaluation of community resources in prevention field and detailed review of role of school, family, religious institutions, law enforcement agencies, courts, and correctional institutions. Part law enforcement agencies play in juvenile delinquency control, organization and functions of related juvenile agencies, laws governing handling of juvenile offenders, and brief resume of juvenile court and its jurisdiction.

120 Constitutional, Criminal, and Civil Law (3)

Study of U.S. constitution and amendments thereto by text material and case method system; major emphasis in freedom of speech, search and seizure, arrest and detention, interrogation and confession, self incrimination, right to counsel, double jeopardy, and due process situations.

130 Interviewing and Report Writing (3)

Examination of interviewing and interrogation procedures employed by law enforcement for obtaining information plus practical experience in use of methods. Mechanics of writing reports, including collecting information and taking statements, writing descriptive narratives, and report revision.

140 Introduction to Criminalistics (3)

Survey of systematic collection of evidence and potentialities and recommendations of applied science to criminal investigation. Includes demonstration of techniques utilized in processing criminal evidence and practical experience in selected crime lab methods.

150 Police Patrol Operations (3)

Focus on patrol function. Examination of purposes, methods, techniques, and types of patrol. Overview of support services, examination of various police services and public assistance, and analysis of deployment procedures and practices as related to overall mission of police patrol.

200 Procedures, Rules, and Test of Evidence (3)

Prereq: 120 or perm. Instruction designed to acquaint officer with court system in Ohio, its functions, authority, and duties. Explains workings of all courts of record and provides description of mayor's courts which are only courts not of record in State of Ohio. Kinds and degrees of evidence. Admissibility of evidence in criminal court cases, materiality and competency of evidence. Distinction between admissions and confessions; exceptions to hearsay rule; types of evidence.

210 Cybernetics (3)

Application and use of computers and/or automated systems for rapid storage and retrieval of information. Types of electronic data processing systems and their compatibility with contemporary police operations explored.

220 Court Procedures and Processes (3)

Case preparation, officer testimony and demeanor in court, effective preparation and presentation of criminal evidence, trial procedures, utilization of written notes, and reaction to cross examination.

230 Police Community Relations (3)

Nature of relationships between police and various segments of community; racial and/or ethnic minorities, news media, clergy, and youth explored. Historical reasons for present dilemma and suggested changes to alleviate these problems.

240 Law Enforcement, Administration, and Supervision (3)

Prereq: 2nd yr law enforcement technology students or law enforcement personnel. Principles of law enforcement agency

administration. Organization, planning and research, management, personnel management, training, and public relations. Administrative functions in vice control, crime delinquency prevention and control, patrol, investigation, communications, statistics, and records.

250 Vice and Narcotic Control (3)

Exploration of history, identification, and effects of narcotics. Narcotic and vice problem as it exists and penal statutes affecting control of narcotics and vice studied.

260 Criminal Investigation (3)

Fundamentals of investigation; crime scene search and recording; collection and preservation of physical evidence, scientific aids, *modus operandi*, sources of information, interviews and interrogation, follow-up, and case preparation. 3 lec, 2 lab.

270 Arrest, Search, and Seizure (3)

Prereq: 200. In-depth discussion of moral and legal obligations in use of police weapons. Includes legal provisions, safety precautions, and restrictions in use of firearms. Advanced theories and application, police combat shooting, all-weather firing, and new developments in police weaponry. Training for student in lawful methods of search and seizure and discussion of search of persons, places, and things, with emphasis on legality. Applicable court decisions and rulings presented and discussed. 3 lec, 2 lab.

280 Traffic Enforcement, Education, and Engineering (3)

Prereq: 102. Law relating to registration of motor vehicles, driver's license, Vehicle Code sections most often encountered and violated, regulation and traffic control, traffic accident investigation, traffic accident report forms; types and uses.

290 Special Problems (3)

Provides opportunity for students to explore topics of interest on individual basis, or in structured courses developed as common interest arises.

LIBRARY AND INFORMATION TECHNOLOGY

The complete A.A.S. program in library and information technology is available only on the Lancaster Campus. Selected courses are offered in Athens and on other campuses.

101 Introduction to Libraries and Information Services (3)

General introduction to libraries, their organization and use for any student. Required for students interested in employment as library technical assistants in special, school, public, or college libraries.

102 Circulation and Public Communication (4)

Designed to acquaint library technology students with various kinds of public services including circulation control systems, location of information, and public relations.

103 Basic Reference (4)

Emphasizes materials and techniques in reference and information services. Includes understanding of skills needed in patron interviews.

104 Basic Acquisitions of Media (4)

Basic procedures in ordering, receiving, organizing, and processing of printed library materials.

105 Records Management and Filing (3)

Overview of tasks involved in setting up and maintaining filing system plus practice in specific filing methods: alphabetic, numerical, color-coded, subject. Also includes equipment needed, records circulation and storage procedures, and discussion of microform and computer records.

201 Media Selection Tools (4)

Introduces different types of library users—children, young adults, disadvantaged, minorities, etc. Provides background information concerning materials, print and nonprint, to enable LMTC to direct public to library service which will best serve its needs.

202 Programming in Libraries (4)

Specific techniques with which LMTC assists librarian in direct service to community of library users. Introduction of new and innovative methods of servicing total library community.

203 Library Technician Internship I (1)

Prereq: perm. Exploratory experience in several types of libraries: observation plus participation in routines where possible.

204 Introduction to Cataloging (5)

Introduction to simple cataloging and classifying procedures.

205 Library Technician Internship II (3)

Prereq: perm. Work experience — 210 hrs — in library/media center. Exposure to variety of activities under qualified professional staff. Wkly seminar required (See 209).

206 Audio-Visual Methods and Materials (4)

Operation and simple maintenance of audio-visual equipment and technical procedures used in processing, cataloging, circulating, and servicing requests for audio-visual materials.

207 Preparation of Audio-Visual Materials (4)

Preparing simple audio-visual materials and sources of commercially prepared materials.

209 Seminar (1-3)

Prereq: 205. Wkly seminar required of those taking 205. Credit hours determined by amount of necessary independent study.

210 Computers in the Library (4)

Introduction to variety and scope of data bases available in libraries and used by librarians. Includes hands-on experience.

290 Independent Study (1-10)

Prereq: perm. Research in selected areas of library science and technology under direction of faculty member.

LIBRARY SCIENCE

See Education — Curriculum and Instruction.

LINGUISTICS

A major in linguistics is not offered. Students desiring to prepare for graduate study in linguistics should consider taking 270, 280, 290, 350, 380, 390, 440, 460, 470, 480, 482, 486, and 490. Programs in related fields in communications, social sciences, and humanities can be enriched by inclusion of linguistics courses open to undergraduates. See the entry, Linguistics, under Special Curricula in the *College of Arts and Sciences* section of this catalog.

A minor in linguistics requires a minimum of 25 hours, with at least two courses at the 400 level. Areas of specialization include general linguistics, sociolinguistics, and English as a second language.

270 The Nature of Language (5) (2S)

Nontechnical introduction to basic nature of human language: its sound patterns, structure of words and sentences, nature of meaning, children's acquisition of language, animal communication, ways languages change, etc.

280 Language in America (5) (2S)

Prereq: soph or above. Analysis of similarities and differences of language behavior in America.

290 Introduction to Psycholinguistics (4)

Prereq: PSY 101. (fall) Study of linguistic behavior and psychological mechanisms responsible for it.

350 Introduction to General Linguistics (5) (2S)

Prereq: jr or srrank. Technical introduction to devices of language description, and survey of relationships and applications of linguistics to other disciplines.

380 Introduction to Language and Culture (5) (2S)

Prereq: soph or above. Study of similarities and differences of language behavior in variety of cultural contexts.

390 Language of Women and Men (3) (2S)

Prereq: jr rank or perm. American speech as used by women and men in terms of linguistic and social factors.

395 Introduction to Area Linguistics (3-5) (2T)

Prereq: perm. Investigation of linguistic characteristics of specific group or subgroup of languages within Malayo-Polynesian or African families.

440 Introduction to Bilingualism (5)

Prereq: 270 or 350 or perm. (spring) Introduction to bilingual education from legal, sociological, educational, and linguistic perspectives.

445 Instructional Materials in Bilingualism (5)

Prereq: 440 or perm. (summer) Creation and analysis of teaching materials in bilingual education.

460 Phonology (5)

Prereq: 350 or perm. (fall) Introductory course in analysis of sound systems of natural languages.

470 Syntax (5)

Prereq: 350 or perm. (spring) Introduction to theory and application of grammatical analysis of natural languages.

480 TEFL Theory and Methodology (5)

Prereq: 486. (spring) Second language teaching theory and methodology, with emphasis on teaching English as foreign language.

482 Materials in TEFL (5)

Prereq: 480. (summer) Theory and practice of analysis, evaluation, and creation of instructional materials for teaching English as a foreign language.

486 Theories of Language Learning (5)

Prereq: 350. (winter) Introduction to theories of first and second language acquisition and their implication for language teaching methodology.

490 Sociolinguistics I (5)

Prereq: 350 or perm. (winter) Observation and analysis of similarities and differences of language behavior in variety of linguistic and cultural contexts.

491 Sociolinguistics II (5)

Prereq: 490. (spring) Introduction to relationships between interlocking systems of language and social grouping.

499 Special Studies in Linguistics (1-3)

Prereq: perm. Independent study of particular area of interest in linguistics.

MALAYSIAN

See Foreign Languages and Literatures.

MANAGEMENT

191 Workshop in Management (1-4)

Provides traditional and nontraditional students with specialized course offerings directed toward identified needs. Facilitates offering short courses, workshops, and institutes involving intensified instruction in pertinent management areas.

200 Introduction to Management (4) (2S)

Prereq: Not open to CBA students. Nature of managerial concept, managerial functions, and organizational structure, with emphasis on current issues.

300 Management (4)

Prereq: jr rank. Understanding of and practice in solving problems facing managers and administrators using concepts and principles from behavioral sciences and other applicable disciplines. No credit given to students who have completed 200. Students assumed to have background in economics, accounting, business law, and statistics equiv to ECON 101 and 102, ACCT 202, BUSL 255, and QBA 201.

325J Communication Behavior in the Modern Organization (4)

(1J)

Prereq: fr-level Tier I English, jr rank. Introduction to basic concepts of organizational communication and practice with written communication forms (letters and reports). Brief consideration given to oral communication.

340 Organizational Behavior — Micro Perspective (4)

Prereq: 300 or 200 or perm. Conceptual framework of behavioral sciences to management and organizations. Motivation and leader behavior within organizational settings.

345 Organizational Behavior — Macro Perspective (4)

Prereq: 340 or perm. Organizational theory and behavior emphasizing formal organizational theory and work group behavior. Concentrates on interaction between organization, its environment and its members, and influences of informal work groups on member behavior.

428 Nonindustrial Labor Relations (4)

Prereq: jr rank and perm. Labor management relations problems and practices in nonprofit-making organizations such as government (city, county, state, and federal), educational institutions, charity and health care organizations. Covers such topics as relevant laws and regulations, administrative response to unionization attempts, contract negotiations, contract administration including grievance handling and arbitration through lectures, readings, and case analyses.

430 Management Systems — Decision-Making (4)

Prereq: 300 or 200 or perm. Decision-making and problem solving in organizations from managerial perspective.

435 Management Systems — Information Handling (4)

Prereq: 300 or 200 or perm. Focuses upon humans and machines as components of formalized information systems. Subject matter approached from systems and procedures viewpoint, with particular emphasis on management planning and control techniques.

450 Managing Health Care Organizations (4)

Prereq: 200 or 300. Develops conceptual tools for understanding health care management problems.

484 International Comparative Management (4)

Prereq: sr rank. Survey and analysis of similarities and differences in management systems, processes, and styles, as well as evaluation of changes and their impact in selected groups of countries.

491 Seminar (3, 4, or 5)

Prereq: perm. Selected topics of current interest in management and organizational behavior area.

492 Management Thought (4)

Prereq: sr rank. Review of development of managerial theories from 5000 B.C. to present with consideration of their application to present organizational settings.

493 Readings (1-5)

Prereq: perm. Readings in selected fields of management and organizational behavior. Topics selected by student in consultation with faculty member.

494 Management Research (4)

Prereq: 12 hrs of management courses. Practical application of research methods in behavioral sciences to management problems, emphasizing research available and its use in decision making and in solving managerial problems.

497 Independent Research (1-5)

Prereq: perm. Research in selected fields of management and organizational behavior under direction of faculty member.

MANUFACTURING TECHNOLOGY

See Industrial Technology.

MARKETING

The marketing major prepares students to become professional marketing personnel via available coursework in sales management, marketing research and consumer behavior, and marketing analysis and management.

In addition to the B.B.A. degree requirements, a student majoring in marketing must complete 24 hours of marketing courses at the 300 or 400 level including 463.

101 Consumer Survival in the Marketplace (4)

How consumer can adapt himself or herself to modern marketing environment so as to optimize satisfaction derived from spending his or her money.

301 Marketing Principles (4)

Prereq: Nonbusiness major, ECON 101 and 102, jr rank. Principles of marketing management with emphasis on practices and problems of marketing manager; analysis of marketing environment; lecture supplemented with cases.

303 Marketing Problems and Cases (4)

Prereq: 301 and perm. Problems facing manufacturers and middlemen in marketing programs. Students will develop integrated marketing programs based on cases taken from actual business situations. Emphasis on development of analytical skills.

360 Marketing for Nonprofit Organizations (4)

Prereq: 301 or perm. Focuses application of basic marketing principles on organizations which have objectives other than achieving profit. Topics include orienting products to clients, building communication flows with and motivating both internal and external publics, application of marketing research and segmentation analysis, identification of publics and analysis of needs.

379 Marketing Research (4)

Prereq: 301, QBA 201, and perm. Techniques involved in collection, tabulation, and analysis of marketing information.

404 Management of Distribution (4)

Prereq: 301 and perm. Problems encountered by manufacturer in establishing and maintaining effective distribution system, concentrating on channel design and strategies.

425 Industrial Marketing (4)

Prereq: 301 and perm. Investigation and analysis of problems involved in marketing of industrial products.

441 International Marketing (4)

Prereq: 301 and perm. Marketing problems, opportunities, and organization of multinational firms to serve overseas markets. Government aids and impediments and comparison of markets and marketing techniques in U.S. and foreign countries.

444 Consumer Behavior (4)

Prereq: 301 and 8 hrs psychology and/or sociology and perm. Individual, social, and cultural influences that affect consumer behavior. Consideration of explanatory and predictive models.

446 Sales Forecasting (4)

Prereq: 301. Forecasting techniques and methodologies applied to estimation of future environments in which business and marketing managers will have to operate.

450 Management of Promotion (4)

Prereq: 301 and perm. Problem-solving course leading to development and management of firm's promotional mix with emphasis on use of mass media and on stimulation of reseller's cooperation.

458 Sales Management (4)

Prereq: 301 and perm. Principles and practices in planning, organizing, and controlling sales force. Selection, training, compensating, supervising, and stimulating salespeople. Analysis of sales potentials and costs.

461 Social Issues of Marketing (4)

Prereq: perm. Designed to increase awareness of future marketing managers of contemporary social issues and legal requirements of marketplace. Social critics, past and present, and their criticisms, including excessive promotion, unsafe and unnecessary products, high prices, and possible societal and governmental responses to these criticisms.

462 Product Development (4)

Prereq: 301. Examination of new product development activities to identify significant factors to be studied and decisions required in researching, manufacturing, and marketing new products.

463 Marketing Strategy (4)

Prereq: sr rank and marketing major with 16 hrs of marketing or perm. Analysis of preparation and organization of overall marketing plans and elements of marketing mix. Also developed are merchandising analyses, objectives, and strategies which take into consideration ever-changing consumer, trade, and legal environment.

480 Mathematical Models of Marketing Analysis (4)

Prereq: 479 and perm. Quantitative techniques that can be used in analysis of marketing problems and application of these methods to problem situations. (Taught on team basis with marketing and quantitative business analysis faculty.)

485 Advanced Marketing Research (4)

Prereq: 479 or perm. Continuation of beginning marketing research course with emphasis on topics not covered by 1st course. Example of topics, which is not inclusive: (1) statistical procedures and their marketing applications, (2) brand positioning and market segmentation using marketing research techniques, and (3) managerial cases which use marketing research as focus.

491 Seminar (3, 4, or 5)

Prereq: perm. Selected topics of current interest in marketing area.

497 Independent Research (1-4)

Prereq: perm. Research in selected fields of marketing under direction of faculty member.

498 Internship (1-4)

Prereq: perm.

MATHEMATICS

The requirement for the A.B. or B.S. degree major in mathematics is 50 quarter hours in courses numbered 200 or above, 15 hours of which must be chosen from courses numbered 333 and above (exclusive of 490 and 491), all taken for grade. The requirement for a minor in mathematics is 30 quarter hours in mathematics courses numbered above 200, including ten quarter hours of courses numbered 333 or above.

When planning any program of study in mathematics, it is strongly recommended that the student consult an advisor from the department.

A student wishing to study mathematics strictly from a mathematician's viewpoint, in specially designed courses, should inquire about our tutorial program. (Standard courses listed in the bulletin are designed to serve many departments and purposes.)

A student studying mathematics with the view of eventually doing graduate work in mathematics is encouraged to pattern a program around the following suggested basic course selections: MATH 263A, B, C, 340, 360, 211, and/or 314, 411, 460A, B, C, and at least one (possibly both) of the sequences 413A, B or 480A, B. For more detailed information and recommendations, the student should consult the Special Curricula in the *College of Arts and Sciences* section of this catalog.

A student wishing to use mathematics training in business and industry may elect to pursue studies in applied mathematics. Such a course of study may terminate in a B.S. degree or be continued into graduate studies. For more detailed information and some example programs of study, the student should consult the Special Curricula in the *College of Arts and Sciences* section of this catalog.

A student preparing for teacher certification should seek a broad background in various areas of mathematics, including algebra, analysis, geometry, computer science, probability and statistics. In addition to the specified course requirements listed by the College of Education, suggested electives include: MATH 211, 250B, 300, 307, 333, 360, and 406. Consult an advisor in the Mathematics Department or College of Education for additional information.

Courses labeled 151 or below (with the exception of MATH 116 or 118 when taken as a prerequisite for MATH 263B) are not open for credit to students who have passed a mathematics course with a number higher than 151. MATH 113, 116, 117, 118, and 130 are essentially remedial precalculus courses. Before enrolling in MATH 163A or 263A, it is recommended that the student take a self-administered test available at the Mathematics Department or at University College to decide if any of these remedial courses are needed.

101 Basic Mathematics (4)

Prereq: placement or perm. Fundamental course in arithmetic and elementary algebra for students with unusually weak backgrounds. Credit applies as hours toward graduation but meets no other college requirement. No credit to student who has passed higher-level mathematics course.

113 Algebra (5) (1M)

Prereq: at least 1 yr h.s. algebra. Review topics in high school algebra including linear and quadratic equations and inequalities, factoring, fractions, radicals and exponents, and simple graphing techniques.

116 Analytic Trigonometry (2)

Prereq: 2 yrs h.s. math. Trigonometric functions and their properties, identities, equations, and applications.

117 Elementary Applied Mathematics (4) (1M)

Prereq: at least 1 yr h.s. algebra. Topics from intermediate algebra such as functions and graphs, systems of linear equations, 3x3 determinants, factoring, quadratic equations and inequalities, exponents and radicals, and logarithms. Application of mathematical concepts and skills to developing mathematical models and problem solving emphasized. Credit not awarded for this course and 113.

118 Elementary Applied Mathematics (4) (1M)

Prereq: 117 or 2 yrs h.s. algebra. Topics from trigonometry and analytic geometry including trigonometric functions and their graphs, vectors and oblique triangles, trigonometric identities, j-operator, straight lines, conic sections, and translation of axes. Application of mathematical skills to developing mathematical models and problem solving emphasized. Credit not awarded for this course and 116.

120 Elementary Topics in Mathematics (5) (1M)

Prereq: 2 yrs h.s. math. Emphasis on number system and related properties. Primarily for majors in elementary education and related fields. Does not apply to Arts and Sciences natural science requirements.

121 Elementary Topics in Mathematics (5) (1M)

Prereq: 2 yrs h.s. math. Topics include algebra, geometry, statistics, and probability. Primarily for majors in elementary education and related fields. 120 not a prerequisite. Does not apply to Arts and Sciences natural science requirement.

130 Plane Analytic Geometry (3)

Prereq: 113, or equiv. May be taken concurrently with 116. Straight lines, circles, conic sections, functions, and graphing of functions studied.

151 Mathematics: An Everyday Tool (5) (1M)

Prereq: 2 yrs h.s. math. Applications of elementary math to day-to-day problems. Special emphasis on consumer math such as compound interest, mortgages, and installment buying. Elementary probabilities and statistics with applications. Scientific calculator required. Does not apply to Arts and Sciences natural science requirement.

163A Introduction to Calculus (5) (2N)

Prereq: 2 yrs h.s. math or 113 or equiv. Presents survey of basic concepts of calculus. For students who want introduction to calculus but do not need depth of 263ABC. Note: Not open for credit to students who have credit for 263A.

163B Introduction to Calculus (3) (2N)

Prereq: 163A. Continuation of 163A. Note: not open for credit to students with credit for 263B.

211 Elementary Linear Algebra (5) (2N)

Matrix algebra, determinants, elementary row operations, solutions of linear systems, vector spaces, linear independence of vectors and bases, matrix of linear mapping, eigenvalues and eigenvectors, diagonalization. Though computational techniques

are included, course intended as careful introductory treatment of vector spaces and matrix theory. No credit to students who have completed 410.

250A Finite Mathematics (5) (2N)
Prereq: 2 yrs h.s. math. Set theory; logic; vectors and matrices; linear programming. Not counted toward math minor or major.

250B Finite Mathematics (5) (2N)
Prereq: 2 yrs h.s. math. Elementary probability and statistics. 250A not a prerequisite. Note: Not open for credit to students who have credit for 450A or ISE 304.

263A Analytic Geometry and Calculus (5) (2N)
Prereq: 118, or 4 yrs h.s. math including trigonometry and analytic geometry, or perm of math department. 263A-B-C is a basic introduction to calculus with emphasis on techniques and their applications. Topics covered: functions and limits, differentiation and integration, analytic geometry, vectors, transcendental functions, polar coordinates, solid analytic geometry, partial differentiation, multiple integrals, infinite series. Note: Not open for credit to students who have credit for both 163A and B.

263B Analytic Geometry and Calculus (5) (2N)
Prereq: 263A. Continuation of 263A. See 263A for description.

263C Analytic Geometry and Calculus (5) (2N)
Prereq: 263B. Continuation of 263A-B. See 263A for description.

297T Mathematics Tutorial (1-15)
(fall) Special program for students of unusual ability.

298T Mathematics Tutorial (1-15)
Prereq: 297T. (winter) Continuation of 297T. See 297T for description.

299T Mathematics Tutorial (1-15)
Prereq: 298T. (spring) Continuation of 297T and 298T. See 297T for description.

300 History of Mathematics (5)
Prereq: math major, jr or sr rank. Survey of main lines of mathematical development in terms of contributions made by great mathematicians. Note: Following 3 courses (307, 314, 330) primarily intended for prospective mathematics majors to introduce them to some mathematical theory at elementary level.

307 Introduction to Number Theory (5)
Prereq: MATH 263A, or 163B, 4 yrs h.s. math or equiv. Investigation of properties of natural numbers. Topics include mathematical induction, prime factorization, Euclidean algorithm, Diophantine equations, congruences, and divisibility.

314 Elementary Abstract Algebra (5)
Prereq: 263A, or 163B. Mappings, relations. Definitions and examples of groups. Groups of rotations. Cyclic groups. Lagrange's Theorem. Fields. Polynomials over fields.

320 Teaching of Mathematics in Secondary School (5)
Prereq: 314, 330 and jr rank. Orientation to professional mathematics education and topics related to teaching of mathematics on secondary school level. Not counted toward math major or minor.

330 Foundations of Geometry (5)
Prereq: 263A or 163B. Introduction to axiomatic mathematics via 2 finite geometries and variety of interpretive models. Develops plane Euclidean and non-Euclidean geometries in rigorous fashion from modified Hilbert axiom system.

333 Elementary Projective Geometry (5)
Prereq: 330 or perm. Topics in projective geometry.

340 Differential Equations (5)
Prereq: 263B. Ordinary differential equations and related topics.

343 Mathematical Modelling (5)
Prereq: 163A-B, and 250A-B, or perm. (spring) Construction and analysis of mathematical models and their use in investigation of physical, chemical, biological, social, and environmental problems. Models which use only elementary mathematical concepts stressed.

360 Intermediate Analysis (5)
Prereq: 263C. Rigorous study of limits, continuity, and differentiability of functions of 1 real variable.

397T Mathematics Tutorial (1-15)
(fall) Special program for students of unusual ability.

398T Mathematics Tutorial (1-15)

Prereq: 397T. (winter) Continuation of 397T. See 397T for description.

399T Mathematics Tutorial (1-15)

Prereq: 398T. (spring) Continuation of 397T and 398T. See 397T for description.

406 Foundations of Mathematics (5)

Introductory topics in set theory and axiomatic development of real number system.

407 Number Theory (5)

Prereq: 307, 263C. Topics in number theory.

410 Matrix Theory (5)

Prereq: 263C. Matrix algebra, determinants, solutions of linear systems, eigenvalues and eigenvectors, matrix functions and applications to differential equations. Jordan canonical form, inner products, diagonalization, and generalized inverses. Intended primarily for students interested in applied mathematics, engineering, and sciences.

411 Linear Algebra (5)

Prereq: 211 or 410. (fall) Vector spaces and linear transformations, characteristic values, quadratic forms, dual spaces, normal forms, and Jordan canonical form.

413A Introduction to Modern Algebra (5)

Prereq: 263C (211 or 411 recommended). (winter) Groups, permutation groups, subgroups, normal subgroups, quotient groups. Conjugate classes and class equation formula and its applications to p-groups. Fundamental theorem on homomorphisms.

413B Introduction to Modern Algebra (5)

Prereq: 413A. (spring) Fundamental theorem on finite abelian groups and its consequences. Cauchy theorem and first Sylow theorem. Polynomial rings. UFD and Euclidean domains. Maximal ideals. Algebraic extensions and splitting fields. Fundamental theorem of Galois theory.

439 Topics in Geometry (1-5)

Prereq: perm. When demand is sufficient course in some phase of geometry will be offered under this number. May be repeated for credit up to 10 hrs.

440 Vector Analysis (5)

Prereq: 263C. Vector algebra and its applications. Vector calculus and space curves. Scalar and vector fields, gradient, divergence, curl, and Laplacian. Line and surface integrals. Divergence theorem. Stoke's theorem, and Green's theorem.

441 Fourier Analysis and Partial Differential Equations (5)

Prereq: 340. Representation of functions as sums of infinite series of trigonometric functions, Bessel functions, Legendre polynomials, or other sets of orthogonal functions. Use of such representations for solution of partial differential equations dealing with vibrations, heat flow, and other physical problems.

442 Theory of Linear Programming and Nonlinear Programming (5)

Prereq: 211 or 410, computer programming experience is desirable. Minimization of functions subject to equality and inequality constraints, Kuhn-Tucker theorem, algorithms for function minimization, such as steepest descent and conjugate gradient and penalty function methods. (Not a course in computer programming.)

443 Mathematical Modelling and Optimization (5)

Prereq: 340, 211 or 410. Investigation of differential equation models of physical, social, and biological phenomena by qualitative analysis. Optimal criteria incorporated to convert models to optimal control problems. Pontriagin's maximal principle used to find analytic solutions. Numerical solutions to optimal control problems also treated.

444 Introduction to Numerical Analysis (5)

Prereq: 263C, 340, and CS 220. Polynomial interpolation and approximation; numerical integration and differentiation; numerical solution to differential equations; numerical methods for matrix inversion, determination of eigenvalues, and solutions of systems of equations.

445 Advanced Numerical Methods (4)

Prereq: 441, 444. (winter) Numerical methods for solutions of ordinary and partial differential equations (credit for only 1 of MATH 445 or ET 445).

450A Theory of Statistics (5)

Prereq: 263C (Some students find 250B also helpful). (fall) Probability distribution of 1 and several variables; conditional probability and independence; moment generating functions; central limit theorem.

450B Theory of Statistics (5)

Prereq: 450A. (winter) Sampling theory, estimation of parameters, confidence intervals, analysis of variance, correlation, and testing of statistical hypotheses.

450C Theory of Statistics (5)

Prereq: 450B. (spring) Topics in statistics.

460A Advanced Calculus (5)

Prereq: 360. (fall) Critical treatment of functions of single variable. Emphasis on topics not treated in 360, such as compactness, nested intervals, deeper properties of continuous functions, Riemann-Stieltjes integration, and uniform convergence.

460B Advanced Calculus (5)

Prereq: 460A. (winter) Primarily devoted to study of differential calculus in n -space. Topics include review of inner product spaces and linear transformations, elementary topology of plane, limits and continuity of functions of several variables, directional derivation, differential, chain rule, and implicit function theorem.

460C Advanced Calculus (5)

Prereq: 460B. (spring) Primarily devoted to study of integral calculus in n -spaces. Riemann-Darboux integral, Jordan content, iterated integrals, transformation of integrals, differential forms and their integrals.

470 Applied Complex Variables (5)

Prereq: 263C. Analytic and harmonic functions, Cauchy integral and residue theorems, contour integration, Taylor and Laurent expansions, conformality, and linear transformations with applications.

480A Elementary Point Set Topology (5)

Prereq: 360. (winter) Topology of Euclidean spaces and general metric spaces.

480B Elementary Point Set Topology (5)

Prereq: 480A. (spring) Introduction to general topological spaces.

490 Selected Topics in Mathematics (1-5)

Prereq: perm of instructor and chairman. When demand is sufficient, course in some phase of mathematics will be offered under this number. (May be repeated for credit.)

491 Studies in Mathematics (1-15)

Prereq: 6 hrs of 400-level courses, sr rank or jr rank in Honors Tutorial College, or perm of chairman and instructor. Selected topics in mathematics studied under guidance of instructor particularly interested in field. (May be repeated for credit.)

497T Mathematics Tutorial (1-15)

(fall) Special program for students of unusual ability.

498T Mathematics Tutorial (1-15)

Prereq: 497T. (winter) Continuation of 497T. See 497T for description.

499T Mathematics Tutorial (1-15)

Prereq: 498T. (spring) Continuation of 497T and 498T. See 497T for description.

MEDICAL TECHNOLOGY

See Zoological and Biomedical Sciences.

MENTAL HEALTH TECHNOLOGY

All of these courses must be taken in sequence and are available only to those students who have been admitted to the A.A.S. program in mental health technology. Special permission may be obtained from program director for non-MHT majors to take some courses.

101 Introduction to Mental Health Work (4)

Prereq: admission to program or perm. Orientation to field of mental health and human service. History, definitions, current concepts, and roles of various workers in field reviewed and discussed. Aspects of work with patients and agencies treated through field trips.

205 The Helping Relationship (4)

Prereq: 101. Didactic and experiential study of use of 2-person relationship to promote personal growth and development of clients. Self-awareness, identification of basic helping skills, and practice in application of skills emphasized.

210 Social Casework (4)

Prereq: 205. Covers theory and methods of case management, interviewing and counseling techniques, skills in problem-solving, referrals, advocacy, and case recording. Provides direct contact with patients under supervision of trained personnel.

215 Activity Therapies (4)

Prereq: 210 or perm. Survey of objectives, materials, and techniques of various ancillary therapies including art, music, recreation, psychodrama, horticulture, bibliotherapy, and dance therapy. Students become familiar with organization, content, and application of activity programs for various age levels in both hospital and agency settings.

221 Practicum in Mental Health I (10)

Prereq: 215. 1st of 3-qtr sequence including 16 hrs per wk of work in agency under supervision of professional staff, and on-campus class and lab. Students expected to assume increasing responsibility in direct service to clients. Introductions to gestalt therapy, reality therapy, transactional analysis, and rational emotive therapy presented. (Students provide own transportation.)

222 Practicum in Mental Health II (10)

Prereq: 221. Continuation of field placement, class, and lab. Class topics include behavior management techniques, assertiveness training, and daily living skills.

223 Practicum in Mental Health III (10)

Prereq: 222. Continuation of field placement, class, and lab. Students expected to begin functioning as entry-level practitioners. Class topics include use of psychotropic medication, alcohol and drug abuse, and special topics.

231 Seminar in Mental Health (4)

Prereq: 222. Emphasis on development of skills in case presentation, case management, and interaction with other professionals involved in treatment process. Includes development of skills in utilizing appropriate community resources. Focus on working with children, family therapy, and crisis intervention.

MILITARY SCIENCE (ARMY ROTC)

The Military Science Department offers two programs of instruction leading to a commission as a second lieutenant in the United States Army. Military science is an elective program open both to men and to women, who are citizens of the United States.

The four-year program consists of a basic course and an advanced course. The basic course requires successful completion of military science 100- and 200-level courses during the freshman and sophomore years. The advanced course requires successful completion of military science 300- and 400-level courses during the last two academic years. The courses are two credit hours each, with two hours of classroom instruction. During the advanced course there are approximately 20 hours of leadership laboratory each quarter. Additionally, all advanced course students must attend a six-week summer training camp. (See MSC 330 for complete camp description.)

No military obligation is incurred for the first two years of the program. Following completion of the basic course, qualified students are accepted for the advanced course by entering an ROTC contract which obligates the student to complete the program of instruction and accept a commission in the U.S. Army, U.S. Army Reserve, or the Army National Guard. Advanced course students receive a subsistence allowance of \$100 for each academic month of enrollment, not to exceed two years.

The two-year program is offered for students who transfer from

colleges that do not offer ROTC, or students whose academic course load did not permit military science during their first two years. Students may qualify for the two-year program in one of several ways. The first is by attending Army ROTC Basic Camp (see MSC 230 for complete camp description) and upon successful completion of camp the student may enter the advanced course. Attending basic camp does not require the student to continue in the program nor does it incur any military obligation. The second is by receiving credit for honorable prior military service of at least one year, as determined by the professor of military science. Additionally, a student may receive credit for two or more years of junior ROTC at the high school level. After receiving credit for the basic course, the student proceeds with the advance course as previously described.

Regional Campus Student. Students at the five Ohio University regional campuses may participate in the two-year program by attending advanced course classes at the Athens campus. Special sections are offered on Fridays to enable students to attend class, leadership lab, and related activities.

101 Introduction to Military Science (2)

Broad overview of military science curriculum, to include role of Army officer and career opportunities available to Army officer. Selected topics include rifle marksmanship, adventure training, U.S. Forces deployment, and comparative military strength analysis.

102 Leadership and Management I (2)

Principles and techniques of leadership including basic qualities of leadership and special problems of military leadership. Psychological, physiological, and sociological factors affecting human behavior and proven techniques of military leadership.

103 Map Reading and Orienteering (2)

Fundamental map reading and orienteering techniques with emphasis on development of land navigation skills. Instruction includes practical field exercises in orienteering.

201 Adventure Training and Survival (2)

(fall) Adventure training and survival course intended to present broad overview of wilderness survival techniques and adventure-type training skills.

202 Leadership and Management II (2)

Interdisciplinary approach to study of organizational leadership and serves as major step in student's education in leadership process. Provides basis for understanding relationship of individual differences and leadership process, group dynamics and their relationship to leadership process, and impact of leader's behavior on leadership process.

203 Selected Military Battles and Campaigns (2)

(spring) Development of military art through analysis and evaluation of selected U.S. military battles and campaigns from American Revolutionary War through Vietnam. Specific battles and campaigns studied, with emphasis on application and influence of principles of war.

230 Army ROTC Basic Camp (4)

6-wk summer training camp that qualifies students for direct entry to advanced ROTC course. Covers military-oriented subjects which prepare students for jr and sr level military science courses. Instruction in role and mission of Army, map reading/land navigation, rifle marksmanship, basic leadership techniques, physical training/marches, individual and unit tactics, communications, first aid, drill, parades and ceremonies, military courtesy and traditions, and rappelling. Camp is rigorous and demanding. Applications accepted from sophs, jrs, srs, and grad students with 2 academic yrs remaining. Conducted at Fort Knox, KY during 6-wk period in June, July, and August. Transportation to camp and return transportation to home of record paid by Army. Uniforms, meals, and housing provided by Army. Students may apply for special 2-yr ROTC scholarship at camp. Participants paid by Army.

301 Introduction to Tactics (2)

(fall) Basic soldiering techniques emphasizing individual tactical training, organization of small military teams, and application of patrolling techniques.

302 Squad Tactics (2)

Prereq: Completion of 301. (winter) Continuation of 301. Instruction deals with offensive and defensive tactics employed by infan-

try rifle squad. Emphasis on leadership responsibilities during conduct of tactical operations.

303 Platoon Level Tactics (2)

(spring) Operational methods, leadership techniques, organization, weapons systems, and communications systems used in tactical employment of infantry rifle platoon. Emphasis on offensive aspects of military operations.

310A Advanced Leadership Laboratory (0)

Prereq: enrollment in military science advanced course. (fall) Development of proficiency and leadership potential by participation in planning and conducting tactical training, drill and ceremonies, and other military subjects.

310B Advanced Leadership Laboratory (0)

Prereq: enrollment in advanced course. (winter) Continuation of 310A. See 310A for description.

310C Advanced Leadership Laboratory (0)

Prereq: 310A. (spring) Continuation of 310A-B. See 310A for description.

330 Army ROTC Advanced Camp (4)

Prereq: enrollment in Army ROTC commissioning program. 6-wk field training session conducted at Army installation; normally scheduled between jr and sr yrs. Includes instruction in techniques of leadership and basic military skills. Students receive extensive evaluations based on performance in various leadership positions at camp. Transportation to and from camp paid by Army. Uniforms, meals, and housing at camp provided by Army. Students receive approximately \$600 military pay at camp.

401 The Contemporary Army Officer (2)

Prereq: perm. (fall) Introduction to profession of arms with emphasis on its characteristics and responsibilities. Discussion of military professional ethics and ethical decision making with illustration through use of case studies.

402 Military Justice (2)

Orientation of military justice system as outlined within U.S. Uniform Code of Military Justice. Examines military law, discipline, behavior modification, and nonpunitive actions as management tools of military leader. In addition, other aspects of unit administration (supply, maintenance, and personnel affairs) introduced.

403 World Change (2)

U.S. in contemporary world scene. Multidiscipline course with guest lectures from broad variety of University departments. Includes study of other major actors in world arena.

410A Advanced Leadership Laboratory (0)

Prereq: enrollment in military science advanced course 2nd yr. (fall) Practical experience as cadet officer in conduct of drill and ceremonies; training management; maintaining discipline, and demonstration of morale and range of factors which affect morale.

410B Advanced Leadership Laboratory (0)

Prereq: 2nd yr advanced course. (winter) Leadership seminar and service orientation.

410C Advanced Leadership Laboratory (0)

Prereq: 410A. (spring) Continuation of 410A-B. See 410A for description.

MUSIC

Applied Music

Fee for private instruction for all applied music (piano, voice, organ, strings, woodwinds, brass, percussion) is \$12 per quarter hour.

Note: A description of the proficiency requirements for applied music may be obtained from the School of Music.

090 Performance Laboratory (0)

Required each qtr of all undergraduate music majors and students enrolled in 101-102-103.

- 141 Class Piano (2)**
Prereq: perm; music majors only. *M. Stewart.*
- 141A Class Piano (2) (2H)**
Prereq: perm; for nonmusic majors. *G. Berenson.*
- 142 Class Piano (2)**
Prereq: perm; 141; music majors only. *M. Stewart.* Continuation of 141.
- 142A Class Piano (2) (2H)**
Prereq: perm; 141B; for nonmusic majors. *G. Berenson.* Continuation of 141A.
- 143 Class Piano (2)**
Prereq: perm; 142; music majors only. *M. Stewart.* Continuation of 141 and 142.
- 143A Class Piano (2) (2H)**
Prereq: perm; 142B; for nonmusic majors. *G. Berenson.* Continuation of 142A.
- 147 Class Voice (2)**
Prereq: perm. *M. Stephenson.* For students enrolling in beginning voice.
- 147A Class Voice (2) (2H)**
Prereq: For nonmusic majors; perm. Beginning instruction in voice for nonmusic majors.
- 148 Class Voice (2)**
Prereq: 147. *M. Stephenson.* Continuation of 147. See 147 for description.
- 148A Class Voice (2) (2H)**
Prereq: perm; 147A; for nonmusic majors. (winter) Continuation of 147A. See 147A for description.
- 149 Class Voice (2)**
Prereq: 148. *M. Stephenson.* Continuation of 147 and 148. See 147 for description.
- 149A Class Voice (2) (2H)**
Prereq: 148A; for nonmusic majors. (spring) Continuation of 148A. See 148A for description.
- 162 Classical Guitar (2)**
Prereq: perm. Introduction to music and technique of classical guitar including solo and accompaniment styles. Nylon-string guitar preferred but not required. No previous training necessary.
- 162A Jazz Guitar (2)**
Prereq: perm. Introduction to playing jazz guitar as harmonic-rhythmic and solo instrument. Emphasis on reading and improvising. No previous training necessary.
- 241 Class Piano (2)**
Prereq: music majors only; 143 with minimum grade of C-; perm. *M. Stewart.*
- 241A Class Piano (2) (2H)**
Prereq: 143A or perm; for nonmusic majors. *G. Berenson.*
- 242 Class Piano (2)**
Prereq: 241 or perm; for music majors only. *M. Stewart.* Continuation of 241.
- 242A Class Piano (2) (2H)**
Prereq: 241A or perm; for nonmusic majors. *G. Berenson.* Continuation of 241A.
- 243 Class Piano (2)**
Prereq: 242 or perm; for music majors only. *M. Stewart.* Continuation of 241 and 242.
- 243A Class Piano (2) (2H)**
Prereq: 242A or perm; for nonmusic majors. *G. Berenson.* Continuation of 242A.
- 244 Varsity Band (1)**
Prereq: perm; audition. *R. Socciarelli.*
- 244A Marching Band (2)**
Prereq: perm (audition). *R. Socciarelli.*
- 244B Wind Ensemble (2) (2H)**
Prereq: perm (audition). *R. Socciarelli.*
- 244D University Band (1)**
Prereq: nonmusic majors only, audition. *Staff.*
- 245 Choral Union (1) (2H)**
Prereq: perm (audition). *I. Zook.*
- 246 Symphony Orchestra (2) (2H)**
Prereq: perm (audition). *K. Andrews.*
- 250 University Singers (2) (2H)**
Prereq: perm (audition). *I. Zook.*
- 251 Chamber Orchestra (1) (2H)**
Prereq: perm (audition). *K. Andrews.*
- 252 Opera Theater (1-4) (2H)**
Prereq: perm (audition). *E. Payne.*
- 253 Jazz Ensemble (1) (2H)**
Prereq: perm (audition). *E. Bastin.*
- 254A Chamber Music, Strings (1) (2H)**
Prereq: strings only; perm. Participation in playing of standard string chamber literature.
- 254B Chamber Music, Woodwinds (1) (2H)**
Prereq: woodwinds only; perm. Participation in playing of standard woodwind chamber literature.
- 254C Chamber Music, Brass and Percussion (1) (2H)**
Prereq: brass and percussion only; perm. Participation in playing of standard brass and percussion chamber literature.
- 254D Chamber Music, Piano (1) (2H)**
Prereq: piano only; perm. Participation in playing of standard piano chamber literature.
- 254E Chamber Music, Contemporary (1) (2H)**
Prereq: perm, audition. (winter, spring) New music ensemble. Participation in performing contemporary chamber music for various ensembles of instruments and voices.
- 255 Trombone Choir (1) (2H)**
Prereq: perm (audition). *R. Fink.*
- 256 Percussion Ensemble (1) (2H)**
Prereq: perm (audition). *G. Remonko.*
- 257 Collegium (1) (2H)**
Prereq: perm, audition. *R. Wetzel.*
- 340 Voice (1-6) (2H)**
Prereq: perm. *N. Beebe, E. Payne, M. Stephenson, I. Zook.*
- 341 Piano (1-6) (2H)**
Prereq: perm. *G. Berenson, E. Jennings, M. Stewart, R. Syracuse.*
- 342 Harp (1-6) (2H)**
Prereq: perm. *L. Jennings.*
- 342A Class Harp (1) (2H)**
Prereq: perm. *L. Jennings.*
- 343 Organ (1-6) (2H)**
Prereq: perm. *E. Wickstrom.*
- 344 Violin (1-6) (2H)**
Prereq: perm. *H. Beebe.*
- 345 Viola (1-6) (2H)**
Prereq: perm. *H. Beebe.*
- 346 Violoncello (1-6) (2H)**
Prereq: perm. *L. Conkling.*
- 347 Double Bass (1-6) (2H)**
Prereq: perm. *L. Conkling.*
- 348 Flute (1-6) (2H)**
Prereq: perm. *K. Andrews.*
- 349 Oboe (1-6) (2H)**
Prereq: perm. *R. Kemper.*
- 350 Bassoon (1-6) (2H)**
Prereq: perm. *H. Robison.*
- 351 Clarinet (1-6) (2H)**
Prereq: perm. *D. Lewis.*
- 352 Alto Saxophone (1-6) (2H)**
Prereq: perm. *A. Reilly.*
- 353 Trumpet (1-6) (2H)**
Prereq: perm. *E. Bastin.*

- 354 Horn (1-6)** (2H)
Prereq: perm. *W. Brophy.*
- 355 Euphonium (1-6)** (2H)
Prereq: perm. *R. Fink.*
- 356 Trombone (1-6)** (2H)
Prereq: perm. *R. Fink.*
- 357 Tuba (1-6)** (2H)
Prereq: perm. *R. Smith.*
- 358 Percussion (1-6)** (2H)
Prereq: perm. *G. Remonko.*
- 359 Class Piano (2)**
Prereq: 243 with minimum grade of C-; perm. *M. Stewart.*
- 360 Class Piano (2)**
Prereq: 359 or perm. *M. Stewart.*
- 361 Class Piano (2)**
Prereq: 360 or perm. *M. Stewart.*
- 370 Practicum in Music (1-2, max 12)**
Prereq: perm. Provides practical experiences such as supervised private and/or small group teaching, seminars in instrument repair, small touring ensembles, and pit orchestra performance. May be repeated.
- 372 Advanced Instruction in Functional Piano (2)**
Prereq: jr level in piano or perm. (fall) Instruction to provide greater facility in handling basic functional keyboard skills. Emphasis on transferring these skills to actual situations encountered as music educators and/or music therapists.
- 373 Advanced Instruction in Functional Piano (2)**
Prereq: 372 or perm. (winter) Continuation of 372. See 372 for description.
- 374 Advanced Instruction in Functional Piano (2)**
Prereq: 373 or perm. (spring) Continuation of 372 and 373. See 372 for description.
- 451 Accompanying (1, max 3)**
Basic problems in accompanying vocalists and instrumentalists—rehearsal techniques, ensemble, pedaling, balance, etc. May be repeated.
- 452 Piano Pedagogy (2)**
(fall) Provides creative teaching strategies for piano teacher. Teaching philosophies, objectives, and procedures discussed and applied to group and private piano instruction. Includes teaching techniques for working with students of all ages and levels.
- 453 Piano Pedagogy (2)**
Prereq: 452. (winter) Continuation of 452. See 452 for description.
- 454 Piano Pedagogy (2)**
Prereq: 453. (spring) Continuation of 452 and 453. See 452 for description.
- 455 Conducting (3)**
Prereq: 203, 205. *C. Powell.* Basic beat patterns, technique of baton, and use of left hand. Experience in conducting choral and small instrumental ensembles in works suitable for school groups.
- 456 Choral Conducting (3)**
Prereq: 206, 455. *C. Powell.* Specialized conducting techniques for choral groups, including experience in conducting works suitable for high school and college groups.
- 457 Instrumental Conducting (3)**
Prereq: 206, 455. *R. Socciairelli.* Experience in conducting from full score; includes band and orchestral works suitable for high school groups.
- 458A Solo Repertoire of String Instruments (1)**
Prereq: 323, perm. (spring) Survey of student's major performance instrument literature.
- 458B Solo Repertoire of Woodwind Instruments (1)**
Prereq: 323; perm. Survey of student's major performance instrument literature.
- 458C Solo Repertoire of Brass and Percussion Instruments (1)**
Prereq: 323; perm. (spring) Same as 458B.
- 458D Solo Repertoire of Vocal Music (1)**
Prereq: 323; perm. (spring) Same as 458B.
- 458E Solo Repertoire of Piano Music (1)**
Prereq: 323; perm. Same as 458B.
- 459A String Instrument Pedagogy (2)**
Prereq: perm. (winter) Teaching techniques of string instruments and use of selected materials for various levels of ability. Includes practical experience in teaching.
- 459B Woodwind Instrument Pedagogy (2)**
Prereq: perm. Teaching techniques of woodwind instruments and use of selected materials for various levels of ability. Includes practical experience in teaching.
- 459C Brass and Percussion Instrument Pedagogy (2)**
Prereq: perm. (spring) Teaching techniques of brass and percussion instruments and use of selected materials for various levels of ability. Includes practical experience in teaching.
- 459D Vocal Pedagogy (2)**
Prereq: perm. Teaching techniques of voice and use of selected materials for various levels of ability. Includes practical experience in teaching.
- 459E Class Piano Pedagogy (2)**
Prereq: perm. *M. Stewart.* Practical teaching techniques unique to class piano instruction, particularly in electronic lab. Examination of useful materials for various levels of ability. Includes some experience in classroom teaching.
- 497 Recital (1-2)**
Prereq: perm, jr and sr only. For jr or sr planning to present public recital.

Music Education

- 160 Music Fundamentals (3)**
For elementary education majors only.
- 161 Music for the Classroom Teacher (3)**
Prereq: 160 with minimum grade of C. Methods of teaching elementary music. For elementary education majors only.
- 261 String Methods and Materials (2, max 6)**
Prereq: soph rank in music education/music therapy. Instruction in stringed instruments with emphasis on teaching techniques, methods, and materials.
- 262 Music in Early Childhood (3)**
Prereq: HECF 160 or EDEL 200 or perm. Methods and materials for esthetic development of preschool children. Exploration of reading readiness and vocal, rhythmic, listening activities.
- 263 Wind and Percussion Methods and Materials (2, max 12)**
Prereq: soph rank in music education/music therapy. Instruction in wind and percussion instruments with emphasis on teaching techniques, methods, and materials.
- 363 Methods and Materials of Instrumental Music (3)**
Prereq: jr rank in music education/music therapy. Study of procedures for organization, implementation, and administration of instrumental music and survey of materials used in teaching instrumental music in public schools.
- 364 Secondary School Vocal Techniques and Materials (3)**
Prereq: jr rank in music education/music therapy. (spring) Literature and rehearsal techniques for high school choral groups.
- 366 Teaching of Music in the Elementary Grades (3)**
Prereq: jr rank in music education/music therapy. (fall) Materials and methods for elementary music. For music majors only.
- 464 Marching Band Techniques (3)**
Prereq: sr rank in music education/music therapy. (spring) Techniques for preparation of high school and college marching band performance.
- 468 General Music in the Junior High School (3)**
Prereq: sr rank in music education/music therapy, perm. (winter) Materials and methods; listening program; changing voice.

Music History and Literature

120 Introduction to Music Literature (2) (2H)

Prereq: for nonmusic major. Development of listening skills for understanding elements of musical style in historical perspective and significance of music as fine art.

123 Introduction to 20th Century Music (2) (2H)

Prereq: 120 or perm, for nonmusic majors. (spring) Selected works from music of 20th-century.

125 Introduction to Music History and Literature (3)

Prereq: music major or perm. (fall) Survey for music majors of musical forms, styles, performance media (including jazz and nonwestern) from Gregorian era to present.

320J Research and Writing in Music (4) (1J)

Prereq: music major or perm. (winter) Development of research and writing skills on musical topics. Includes essays on composers, program notes for concerts, and research paper.

321 History and Literature of Music (3)

Prereq: 103. History of music with survey of musical literature to 1600.

322 History and Literature of Music (3)

Prereq: perm. History of music with survey of musical literature, 1600-1750.

323 History and Literature of Music (3)

Prereq: perm. History of music with survey of musical literature, 1750 to present.

421A The Literature of Vocal Music (3)

Prereq: 323.

421B The Literature of Piano Music (3)

Prereq: 323.

421C The Literature of Chamber Music (3)

Prereq: 323.

421D The Literature of Orchestral Music (3)

Prereq: 323.

421E The Literature of Organ Music (3)

Prereq: 323.

421F The Literature of Opera (3)

Prereq: 323.

427 Folk Music in the United States (3)

Introduction to selected types of folk music in U.S.

428 Jazz History (3)

Study of various musics collectively known as jazz.

Independent Studies in Music

491 Acoustics for Musicians (3)

Prereq: 203, 205, perm. Study of room, concert hall, and stadium acoustics and vibration of strings, rods, plates, and air columns as these principles are related to music teaching and performance. Also, study of temperaments of music scales, intonation, and psychology of music.

498 Independent Project (1-6)

Prereq: perm.

499 Independent Readings in Music (1-12)

Prereq: perm.

Music Theory and Composition

100 Introduction to Music Theory (3) (2H)

Prereq: nonmusic majors only. Introduction to staff, pitch, and rhythmic notation, chords, pop music notation, etc.

101 Music Theory I (4)

Prereq: music theory placement exam; music majors only. Melodic, harmonic, and rhythmic principles of music and its notation. 5 days per wk.

101A Music Theory (3) (2H)

Prereq: nonmajor only, ability to read music. Melodic, harmonic, and rhythmic principles of music and its notation.

102 Music Theory II (4)

Prereq: 101. Continuation of 101. See 101 for description.

102A Music Theory (3) (2H)

Prereq: 101A. Continuation of 101A. See 101A for description.

103 Music Theory III (4)

Prereq: 102. Continuation of 101 and 102. See 101 for description.

201 Music Theory IV (3)

Prereq: music majors only, 103 (minimum grade of C-). Harmonic and contrapuntal practices of 18th, 19th, and 20th centuries, including structural analysis of small and large forms.

202 Music Theory V (3)

Prereq: 201. Continuation of 201. See 201 for description.

203 Music Theory VI (3)

Prereq: 202. Continuation of 201 and 202. See 201 for description.

204 Dictation and Sight Singing (2)

Prereq: music majors only, 103 (minimum grade of C- or perm). Should be taken concurrently with 201.

205 Dictation and Sight Singing (2)

Prereq: 204 with a minimum grade of C-. Continuation of 204.

206 Dictation and Sight Singing (2)

Prereq: 205. Continuation of 205. See 204 for description.

304 Instrumentation (3)

Prereq: 203. (fall) Technical characteristics of instruments of band and orchestra. Arranging for small ensembles.

305 Orchestration I (3)

Prereq: 304. (winter) Scoring for instrumental ensembles with emphasis on intra- and cross-choir scoring. Writing of transcriptions and score reductions.

306 Orchestration II (3)

Prereq: 305. (spring) Continuation of 305. See 305 for description.

310 Composition I (2)

Prereq: 203, 206. Introduction to 20th-century compositional techniques. Writing smaller compositions.

311 Composition II (2)

Prereq: 310. Continuation of 310. See 310 for description.

312 Composition III (2)

Prereq: 311. Continuation of 310 and 311. See 310 for description.

402 Styles I (3)

Prereq: 203, 206 with minimum grade of C- in each. (fall, 1986) Analysis of 15th-century music.

403 Styles II (3)

Prereq: 203, 206 with minimum grade of C-. (winter, 1985) Analysis of post-Romantic music.

404 Styles III (3)

Prereq: 203, 206 with minimum grade of C-. (spring, 1985) Analysis of 20th-century music.

405 Jazz Harmony I (3)

Prereq: 203, 206, perm, keyboard skills as determined by instructor. Harmonic vocabulary, notational systems, and chord progressions in traditional jazz.

406 Jazz Harmony II (3)

Prereq: 405. Continuation of 405. See 405 for description.

407 Counterpoint I (3)

Prereq: 203, 206. (fall, 1985) Analysis and composition in sacred style of 16th and 17th centuries.

408 Counterpoint II (3)

Prereq: 407. (winter, 1986) Analysis and composition of 18th-century contrapuntal forms.

410A Composition (2)

Prereq: 312. Original instrumental and vocal compositions. Investigation of experimental compositional techniques.

41CB Composition (2)

Prereq: 312, 413. Original composition in electronic medium for tape alone, live electronic instruments, or conventional instruments with electronic tape.

411 Composition (2)

Prereq: 410. Continuation of 410. See 410 for description.

412 Composition (2)

Prereq: 411. Continuation of 410 and 411. See 410 for description.

413 Introduction to Electronic Music (2)

Techniques, theories, and esthetics of electronic music. Development of skills as they apply to voltage-controlled synthesizer and tape splicing, and manipulation techniques.

414 Senior Practicum in Theory (2)

Prereq: sr rank. Preparation of theory major's sr project.

Music Therapy

181 Introduction to Music Therapy (3)

(fall) Introduction to clinical practice of music therapy; observation and field trips.

280 Music Therapy Practicum I (1-3)

Prereq: soph rank or perm. Selected field experiences in approved clinical facilities; field evaluation of student.

281 Observation, Evaluation, and Research in Music Therapy (3)

Prereq: soph rank or perm. (fall) Observation and evaluation skill development through classroom, videotape, and field data collection and analysis; tests and evaluations; research methods and their application to clinical investigations (2 lec, 1 lab).

282 Music Therapy Methods and Media (3)

Prereq: 281 or perm. (winter) Development of skills in treatment planning and application including activity design and analysis for problems in all clinical areas.

283 Recreational Music Instruments and Materials (3)

Prereq: perm. (spring) Accompanying instruments and group music activities; special instrumental methods for handicapped.

380 Music Therapy Practicum II (1-3)

Prereq: 283 and jr status in music therapy. Selected field experiences in approved clinical facilities; field evaluation of student.

381 Background in Music Therapy (3)

Prereq: 283 and jr status in music therapy. Historical review, theory of music therapy, music therapy principles, survey of current literature and trends in music therapy; influence of music on behavior, physiology, emotions, learning, and work performance.

382 Music Therapy for Exceptional Children (3)

Prereq: 381 and jr status in music therapy. Problems and therapist strategies and techniques for remediation; terminology; treatment settings; other activity therapy approaches and techniques.

383 Music Therapy in Psychiatry and Rehabilitation (3)

Prereq: 382 and jr status in music therapy. Problems and therapist strategies and techniques for remediation; terminology, treatment settings; traditional and current psychotherapeutic and behavioral approaches; other activity therapy techniques and approaches.

480 Music Therapy Practicum III (1-3)

Prereq: sr rank or perm. Selected field experience in approved clinical facilities; field evaluation of student.

481 Program Development and Administration in Music Therapy (3)

Prereq: 383 and sr status in music therapy. Program development process for selected clinical populations; administration of music therapy program.

482 Psychological Foundations of Music (3)

(winter) Basic study of acoustics, ear and hearing, and psycho-socio-physiological process involved in musical behavior.

489 Clinical Training in Music Therapy (1)

Prereq: 480, perm, and sr status in music therapy. 6 months as full-time music therapy intern at NAMT-approved clinical training facility following completion of sr yr.

NURSING

Associate Degree Program

The following courses for the A.A.S. program in nursing are available only on the Zanesville campus.

101 Nursing I (5)

Prereq: perm. Develop basic nursing skills and use of nursing process system to enable individual to maintain or regain ability to meet daily living needs. Medical asepsis and safety, nurse-patient activity, vital signs, normal nutrition and elimination, and basic interviewing technique.

102 Nursing II (5)

Prereq: perm. Continued development of basic nursing skills. Surgical asepsis, skills to assist patients to meet daily living needs, therapeutic interviewing techniques, terminal life experience, and medication administration considered.

103 Nursing III-A (6)

Prereq: perm. Study nursing care approaches for pathophysiologic conditions of respiratory, gastro-intestinal, and integumentary systems. Nursing responsibilities for fluids and electrolytes, diagnostic tests, medical-surgical treatment, pharmacology, and dietary modifications as applicable to these systems included.

104 Nursing III-B (6)

Prereq: perm. Deals with utilization of nursing process applied to adult patients experiencing cardio-vascular problems, metabolic disorders (specifically cancer), and endocrine disorders. Diagnostic tests, medical and/or surgical interventions, pharmacological treatments, dietary modifications, preventive and restorative nursing considered.

201 Nursing IV (6)

Prereq: perm. Family-life cycle presented as broad concept with emphasis on nursing care of maternity patient and normal newborn infant. Pregnancy viewed as natural and normal process; however, specific deviations presented. Learning opportunities offered in hospital setting, doctors' offices, and in other community facilities.

202 Nursing V (6)

Prereq: perm. Family-centered approach to study of children from early infancy through adolescence. Growth and development needs, potential stresses for child and family related to alterations in health status and impact of hospitalization identified for each age group. Nursing responsibilities relative to basic knowledge and skills central to parent-child nursing practices in hospital, clinic, and home emphasized.

203 Nursing VI (6)

Prereq: perm. Assist nursing students to develop concepts of mental health, understanding of behavior disorders and mental illness, precipitating factors, prevention, treatment modalities, and of individuals who have difficulty in adapting to stress of everyday life. Emphasis on potential therapeutic role nurse can take in assessment, intervention, and in providing support in various environments.

204 Nursing VII (6)

Prereq: perm. Nursing process applied to adult patients with sensorineural, musculoskeletal, and mobility problems. Emergency management as well as principles of rehabilitation nursing emphasized. 3 hrs lec, 6 hrs lab.

205A Nursing VIII (7)

Prereq: perm. Nursing process applied to adult patients with disorders of reproductive and genitourinary systems. Management of patient receiving intravenous therapy included. 2 hrs lec, 10 hrs lab.

205B Nursing VIII (3)

Prereq: perm. Basic nursing leadership skills emphasized. Clinical lab activities provide setting to observe and implement leadership strategies. 2 hrs lec, 3 hrs lab.

206A Trends and Issues in Nursing (1)

Prereq: perm. (fall) Exploration of concerns of nursing profession past, present, and future. Relationships of technical nurse to health professions and community considered. Future personal development of individual technical nurse discussed.

206B Trends and Issues in Nursing (1)

Prereq: perm. (winter) Continuation of 206A. See 206A for description.

206C Trends and Issues in Nursing (1)

Prereq: perm. (spring) Continuation of 206A and 206B. See 206A for description.

250 Independent Study (1-5, max 5)

Prereq: perm. Research, readings, and clinical observations in selected areas of nursing under direction of faculty member.

290A-Z Current Issues in Nursing (1-5, max 5)

Prereq: perm. Series of elective short courses and workshops for nursing students at OU-Zanesville. RNs and allied health professionals from the local area may enroll.

291A-D Current Issues in Nursing (1-5, max 5)

Prereq: perm. Series of elective short courses and workshops for nursing students at OU-Zanesville. RNs and allied health professionals from local area may enroll.

Baccalaureate Program

The following courses for the bachelor of science in nursing degree are offered on the Athens Campus and on regional campuses. The program is for registered nurses only.

300 Concepts of Nursing I (5)

Prereq: Ohio R.N. licensure, admission to nursing major or School Nurse Program. Focus on trends and issues related to transition from technical to professional nursing. Students examine Ohio University School of Nursing philosophy and conceptual framework. History and development of nursing as profession studied. Nursing process presented as tool for professional practice. Introduction to nursing theories and research included. General systems theory, role theory, and ethical considerations of practice presented.

310 Concepts of Nursing II (5)

Prereq: 300 or concurrently with 300 or admission to School Nurse Program. Focus on beginning of total health appraisal of individuals. Course enables students to assess various aspects and dimensions of health of individuals throughout life span. Students will begin to develop nursing skills in health appraisal assessment and plan nursing strategies to maximize individual's health potential. Cultural components of health and nursing care stressed. Health, life style, client health history, psychosocial assessment, and beginning health appraisal skills specifically included. Emphasis on individual's responses as holistic unified system. Clinical lab experiences occur when healthy clients encountered.

320 Concepts of Nursing III (5)

Prereq: 310 or admission to School Nurse Program. Focus on continuation of total health appraisal of individuals begun in 310. Students continue to develop and increase nursing skills in total health appraisal and plan appropriate nursing strategies to maximize individual's health potential. Exercise and fitness assessment, stress assessment and management, alternative health care strategies, and continuation of health appraisal skills specifically included. Students expected to apply previously learned knowledge and skills in all client encounters. As in 310, emphasis on individual's responses as holistic unified system. Clinical lab experiences occur when healthy clients encountered.

330 Concepts of Nursing IV (5)

Prereq: 320, or concurrently with 320. Focus on family unit throughout life cycle and related nursing interventions. Family-centered nursing care provided through use of nursing process. Roles and functions of family studied within traditional and emerging states. Family communication patterns examined. Family health attitudes, values, and beliefs noted. Family assessment conducted. Students explore nursing interventions to enhance health and promote wellness in family. Clinical experiences offered in variety of settings.

340 Concepts of Nursing V (5)

Prereq: 330. Focus on nursing care of families and groups within community populations. Course assists student to view community and its subgroups within dynamic, interactive, open-systems framework. Topics covered include group process, nursing pro-

cess in relation to groups of clients, and basic concepts of community health. Clinical component emphasizes health promotion and illness prevention; student utilizes nursing process, collaboration, and interpersonal skills in working with clients from diverse population groups. Clinical experiences offered in variety of settings.

360 Concepts of Nursing VI (3)

Prereq: 340, or concurrently with 340. Focus on nursing management and leadership. Student introduced to organizational system as unit of study. Various theories and strategies of management, leadership, organizational development, change, decision-making, motivation, problem-solving, conflict and control systems examined. Students study leadership and management as multidimensional processes.

400 Concepts of Nursing VII (5)

Prereq: 360, or concurrently with 360. Focus on research issues in nursing practice. Students examine interrelationships among theory, practice, and research in nursing. Nursing practice models, based on evolving theory and science in nursing, introduced as frameworks for research, scientific inquiry, and critical thinking in nursing. Students guided in their efforts to increase skills in basic research methodology. Student critically examines research process and develops research proposal.

420 Concepts of Nursing IX (5)

Prereq: 400. Focus on nursing of clients with acute alterations in health status. Students explore nursing strategies and interventions in individuals, families, and groups in community in which acute alteration in health states have been experienced. Holistic responses examined in light of physiological, mental, emotional, social, and spiritual disturbances manifested by client(s). Stress as reaction to crisis explored. Nursing intervention strategies for acutely ill presented as well as concepts of death and dying. In lab experience, students plan, implement, and evaluate nursing interventions in secondary and tertiary settings.

430 Concepts of Nursing X (5)

Prereq: 400. Focus on nursing care of individuals, families, and groups experiencing chronic alterations in health throughout life cycle. Students examine physiological, emotional, and social consequences of chronic illness in client populations. Continuation of concepts of death and dying explored from perspective of chronically ill client. Stress as reaction to chronic health problems explored. Students explore nursing strategies and interventions to enhance quality of life for client systems. Nursing process used as framework for intervention. Clinical experiences offered in primary, secondary, and tertiary care settings in community.

440 Concepts of Nursing XI (5)

Prereq: 400. Focuses on application of professional nursing practice role. Assessment of organizational system performed. Concepts related to professional nursing practice such as accountability, autonomy, advocacy, power, authority, influence, and persuasion examined. Students explore, in-depth, role of change agent and ramifications of planned change. Clinical experience occurs in health care organization.

460 Concepts of Nursing XII (3)

Prereq: 420, 430, and 440 or concurrently with 420, 430, or 440 in final quarter of program. Focus on issues and trends in nursing. Synthesis course designed to enhance student's knowledge of professional nursing. Past and present issues and trends in nursing examined. Emerging trends and futuristic nursing studied. Content will vary depending upon student needs and interests as well as events occurring in discipline of nursing.

465 Concepts of Nursing XIII (3)

Prereq: 340. Focus on teaching strategies used by professional nurse in meeting individual, family, and group needs relevant to holistic health care. Teaching strategies based on individual, family, or group learning needs compared and contrasted. Nursing process provides basis for planning, implementing, and evaluating teaching. Classroom experiences provide opportunities for students to practice and demonstrate skills and techniques in preparing, developing, and implementing teaching materials and techniques.

475 Concepts of Nursing XIV (3)

Prereq: 340 or R.N. of sr rank in Rural Gerontology Program. Focus on gerontological nursing. Normal aging process and pathological disturbances in physical and mental functioning associated with aging presented. Techniques in health appraisal for

elderly included. Classroom experiences provide opportunities for students to explore holistic health needs and strategies for elderly. Nursing interventions based on special needs and problems of elderly explored through actual and simulated experiences.

485 Concepts of Nursing XV (3)

Prereq: 340. Focus on legal issues in nursing. Course enhances student's knowledge of legal, legislative, political, and health-care-delivery systems, particularly interface of those systems. Classroom experiences, activities, and assignments enable student to explore relevant ethical, moral, and legal issues involving actual and simulated nursing practice cases.

490 Concepts of Nursing XVII (1-5)

Prereq: Ohio R.N. licensure. Independent study.

491 Concepts of Nursing XVIII (1-3)

Prereq: Ohio R.N. licensure. Nursing workshops.

495 Concepts of Nursing XVI (3)

Prereq: 340. Focus on critical-care nursing. Nursing care requirements of patients in intensive care units, coronary care units, emergency room areas, burn units, etc. presented. Nursing process framework utilized as holistic responses of patients and families to acute life-threatening situations analyzed.

OHIO PROGRAM OF INTENSIVE ENGLISH

Credit hours listed for OPIE 40, 45, 50, 55, 60 are not applicable to degree requirements. For English for nonnative speakers applicable to degree requirements, see ENG 150F, 151F.

40 Intensive English as a Foreign Language (15)

Full-time intensive study of English as foreign language for students beginning at elementary level. Five classroom practice and recitation hrs daily. Primary emphasis on developing mastery of spoken English. Normally followed by 45.

45 Intensive English as a Foreign Language (15)

Prereq: intermediate proficiency level. Full-time intensive study of English as foreign language. 5 hrs of classroom practice and recitation daily. Practice of spoken English continues, but emphasis shifts to written English. May follow 40.

50 Intensive English as a Foreign Language (15)

Prereq: advanced proficiency level. Full-time intensive study of English as foreign language for students beginning at advanced level. 5 hrs of classroom practice and recitation daily. Emphasis on both spoken and written English usage. May follow 40 or 45.

55 Semi-intensive English as a Foreign Language (12)

Semi-intensive supplemental study of English as foreign language for students who may enroll in 1 academic course concurrently. 3 hrs of classroom practice and recitation daily. Classroom activity includes both spoken and written English usage, but emphasis on written language practice. May follow either 45 or 50.

60 Supplemental English as a Foreign Language (8)

Semi-intensive supplemental study of English as foreign language for students enrolled in part-time academic program. 2 hrs of classroom practice and recitation daily. Classroom activity includes both spoken and written English usage, but emphasis on written language practice. May follow either 45 or 50 or 55.

99 Special Studies in English as a Foreign/Second Language (1-10)

Provides independent studies for international students on campus (e.g. pronunciation class or English for Special Purposes).

PHILOSOPHY

The major requirement for the A.B. degree consists of a minimum of 40 hours, including 310, 312, 320, and at least three courses numbered above 400.

There are a number of designated minor programs in philosophy for students whose major field of study is related to a specific

area of philosophy. The general requirement for the philosophy minor is 25 hours, at least 20 of which must be courses numbered 200 or above. There are approved designated minors in Esthetics, Logic, Philosophy of Science, Religion, Social and Political Theory, Ethics, and History of Philosophy. For more information, contact the Philosophy Department.

Students are advised to begin the study of philosophy with a course at the 100 or 200 level. PHIL 101 is a general survey. The other courses at the 100 and 200 level introduce the student to philosophy by applying it to special fields.

101 Fundamentals of Philosophy (5) (2H)

Survey of selected basic problems, concepts, and methods in philosophy.

120 Principles of Reasoning (4) (1M)

Use of evidence in establishing reliable conclusions.

130 Introduction to Ethics (4) (2H)

Discussion of classic and/or modern philosophical views of human values, ideals, and morality. Provides introductory survey of some main problems, concepts, and results of ethics including selected philosophers of past and present.

160 Introduction to Religion (3) (2H)

Definition of religion and analysis of its various aspects including ritual, social, experiential, and symbolic.

216 Philosophy of Science Survey (3) (2H)

Nontechnical survey of types, testing, and credibility of hypotheses; methods of experimental inquiry; measurement; laws, theories, and their role in explanation, concept formation.

231 Philosophy of Sport (4)

Prereq: soph rank. Philosophical exploration into nature, meaning, purposes, values, and ideals of sport. Topics include goods and evils of competition, nature of sports experience, winning and losing, esthetic and ethical dimensions of sport, ultimate athlete, scholastic athletics, philosophy of physical education, concept of sportsmanship, etc.

232 Philosophy of Art (3) (2H)

Conceptual analysis of common assumptions, attitudes, theories, and ideas about arts, their criticism, and appreciation.

235 Business Ethics (3) (2H)

Prereq: soph rank. Examination of moral reasoning as it pertains to institutions and practices of contemporary business. First half is devoted to basic ethical concepts and analysis of basis for acceptable ethical theory, investigation of role of government and society in their relationship to business, and value assumptions behind competing social and political systems businessmen encounter in today's global marketplace. Second half examines specific case studies.

240 Social and Political Philosophy (4) (2H)

Introduction to major philosophical theories concerning nature of social and political communities including those offered by Plato, Aquinas, Hobbes, Locke, Mill, and Rawls. Consideration of some significant specialized problems in social and political theory including distributive justice, civil disobedience, liberty, punishment, etc.

250 Philosophy of Mind (4) (2H)

Mind-body problem; concept of self; human-machine relation; problem of other minds.

260 Philosophy of Religion (4) (2H)

Problems in nature of religion, existence, and nature of God; problem of evil, immortality, and religious language.

297T Philosophy Tutorial (1-10)

Prereq: Honors Tutorial College students only. (fall) 1st yr tutorial studies in philosophy.

298T Philosophy Tutorial (1-10)

Prereq: Honors Tutorial College students only. (winter) 1st yr tutorial studies in philosophy.

299T Philosophy Tutorial (1-10)

Prereq: Honors Tutorial College students only. (spring) 1st yr tutorial studies in philosophy.

301 Introduction (3) (2H)

Prereq: not open to those who have had 101. Analysis of typical philosophical problems arising in study of nature, society, and

religion for purpose of developing thoughtful and consistent intellectual perspective.

310 History of Western Philosophy: Ancient (5) (2H)
Significant ideas of representative Greek and Roman philosophers.

311 History of Western Philosophy: Medieval and Renaissance (5) (2H)
Augustine to Bruno and Campanella.

312 History of Western Philosophy: Modern (5) (2H)

314 19th Century European Philosophy (4) (2H)
Prereq: not open to those who have had former 439. Subjects selected from French, German, and British philosophers of 19th century.

315 American Philosophy (4)
Prereq: 3 hrs above 200 in philosophy. Not open to those who have had former 313. Begins with transcendentalism and includes pragmatism, naturalism, and idealism.

320 Symbolic Logic I (5) (2H)
Techniques of modern symbolic logic.

330 Ethics (5) (2H)
In-depth study focusing on specific philosopher, or on type of ethical or value theory. Topics vary with instructor.

331 Moral Problems in Medicine (5) (2H)
Prereq: soph rank. Philosophical investigation of complex moral problems engendered by modern medicine, *e.g.*, death with dignity, human experimentation, allocation of scarce medical resources, birth defects, killing and letting die, informed consent, etc. Basic philosophical concepts underlying these problems explored, including autonomy, coercion, normality, naturalness, rights, justice, responsibility, personhood, etc.

332 Philosophy of Sex and Love (4)
Prereq: jr rank. Philosophical and evaluative investigation into subject of sexual love and Western morality. Topics include roles and relation between sexes, abortion, monogamy, sexual perversion, homosexuality, promiscuity, adultery, semantics of sex, etc.

333 Philosophy of Literature (3) (2H)
Prereq: jr rank. Examines nature of fictional literature as differentiated from other types of writing and explores philosophical ideas within specific works of fiction, concentrating on problems of translating philosophical content into literary form, especially problems of interpretation, belief, truth, and artistic integrity.

350 Philosophy of Culture (5) (2H)
Philosophical studies of humankind as culture-creating being.

351 Philosophy of Language (4)
Prereq: 6 hrs in philosophy, including 120 or 320. Theories of meaning and reference and their philosophical significance, relations of meaning to verification and truth, and relationship between language and concepts.

358 Existentialism (4)
Prereq: 9 hrs in philosophy. Existential thought from Kierkegaard to Camus stressing such themes as freedom, existence, despair, authenticity, alienation, death, and revolt against system.

361 Old Testament (5) (2H)
Background and development of Old Testament; its philosophical, moral, and religious significance.

362 New Testament (5) (2H)
Background and development of New Testament; philosophical, moral, and religious significance of beliefs of Jesus, Paul, and early Church.

370 Hinduism (4) (2T)
Prereq: jr rank. Vedic religion, Hinduism, Jainism.

371 Buddhism (4) (2T)
Prereq: jr rank. Introduction to doctrines, origins, and varieties.

372 Islam (4) (2T)
Prereq: jr rank. Introduction to core ideas.

373 American Religions (4) (2H)
Prereq: jr rank. Christianity, Judaism, and other religions and developments in U.S.

397T Philosophy Tutorial (1-10)
Prereq: Honors Tutorial College students only. (fall) 2nd yr tutorial studies in philosophy.

398T Philosophy Tutorial (1-10)
Prereq: Honors Tutorial College students only. (winter) 2nd yr tutorial studies in philosophy.

399T Philosophy Tutorial (1-10)
Prereq: Honors Tutorial College students only. (spring) 2nd yr tutorial studies in philosophy.

410S Emergence of a Science (4) (3S)
Prereq: 1 course in science or philosophy; sr rank. For both science and nonscience majors interested in historical and philosophical influences that led to present concept of chemistry as science. Chronological survey, largely nontechnical, of developments in chemistry from antiquity to present combined with discussions of philosophers of science from Thales to Russell.

414 Analytic Philosophy (5)
Prereq: 4 philosophy courses and perm prior to registration. Selected topics in contemporary Anglo-American philosophy from Moore to Wisdom.

415 Contemporary Philosophical Problems (5)
Prereq: 2 courses in philosophy above 400. Issues from current journal literature.

416 Philosophy of Science (5)
Prereq: 216 and 320. Selected problems in logic and methodology of sciences.

417 Philosophy of Logic (5)
Prereq: 320. Philosophical problems connected with formal logic and its relationship to language and reality. Topics include methodology of logic as science, analyticity and necessary truth, meaning and logical form, relationship of logic to natural language, concept of translation, and relation of logic to ontology.

418 Plato (5)
Prereq: 4 philosophy courses, including 310. (alternate yrs).

419 Aristotle (5)
Prereq: 4 philosophy courses, including 310. (alternate yrs).

420 Symbolic Logic II (5)
Prereq: 320. Informal and formal deductive systems, logic of relations, class logic.

421 Proof Theory (5)
Prereq: 320 or equiv. (offered on demand) Syntax and semantics of formal theories.

422 Computability (5)
(offered on demand) Algorithms, recursive functions, Turing machines, decidability.

423 Modal and Many-Valued Logics (5)
Prereq: 320. (offered on demand) N-valued logics, modal logic.

424 Foundation Theory (5)
Prereq: 320 or equiv. (offered on demand) Alternative bases for developing formal theories.

428 Continental Rationalism (5)
Prereq: 4 philosophy courses, including 312. (alternate yrs) Descartes, Spinoza, Leibniz.

429 British Empiricism (5)
Prereq: 4 philosophy courses, including 312. (alternate yrs) Locke, Berkeley, Hume.

430 Contemporary Ethical Theory (5)
Prereq: 4 philosophy courses, including 130 or 330. Significant current literature in selected topics of moral philosophy.

431 History of Esthetic Theory (5)
Prereq: 4 philosophy courses. Readings from Plato to Dewey and relation of these theories to selected arts and recent criticism.

432 Problems in Esthetics (5)
Prereq: 9 hrs philosophy, literature, or art. For students interested in arts but not necessarily in issues primarily of interest to philosophers. Writings drawn from modern sources on theory of art, esthetic criticism, creativity, truth in art, esthetic value.

438 Kant (5)

Prereq: 4 philosophy courses, including 312. (alternate yrs) Kant's *Critique of Pure Reason* with attention given to Kant's ethical theory.

440 Contemporary Social Philosophy (5)

Prereq: 330 or 240 or 442 and 3 other philosophy courses. Consideration of any of number of various issues in contemporary social, political, and legal philosophy. Possible topics: theories of distributive justice, culpability, causality and responsibility, legal and moral rights, etc.

442 Philosophy of Law (5)

Prereq: 3 philosophy courses or perm. Consideration of nature and justification of law and examination of some specialized topics in philosophy of law including ascription of responsibility, civil disobedience, theories of punishment, liberty, etc.

444 Philosophy of Marxism (5)

Prereq: 4 philosophy courses. Philosophical inquiry into classical and contemporary Marxist thought stressing Marx, Engels, Lenin, Stalin, Mao, and several contemporary Marxists such as Praxis group of Yugoslavia.

448 Pragmatism (5)

Prereq: 4 philosophy courses. (alternate yrs) Pierce, James, Dewey.

450 Theory of Knowledge (5)

Prereq: 4 philosophy courses, including 312. Critical examination of various views of what knowledge is and how it is attained.

451 Metaphysics (5)

Prereq: 4 philosophy courses, including 310 or 312. Basic alternative conceptions of world, and such topics as nature of substance, causality, self, freedom, space, and time.

452 Myth and Symbolism (5)

Prereq: 4 philosophy courses. Characteristic expressions of thought in primitive societies and theories concerning primitive mentality.

458 Contemporary German Philosophy (5)

Prereq: 4 philosophy courses including 358 and 468. (alternate yrs) Analysis of themes in Husserl, Heidegger, Scheler, Hartman, Dilthey, Cassirer, Gebser, and Ingarden, stressing phenomenological roots as well as new philosophic directions.

459 Contemporary French Philosophy (5)

Prereq: 4 philosophy courses, including 358 and 468. (alternate yrs) Trends in contemporary French philosophy, stressing Sartre, Camus, Marcel, Merleau-Ponty, and Ricoeur, emphasizing existential backgrounds of French thought and its adaptation of existential themes.

460 Contemporary Religious Thought (5)

Prereq: 4 philosophy courses. Representative thinkers such as Tillich, Buber, and others.

468 Phenomenology (5)

Prereq: 4 philosophy courses, including 312. Method and philosophy of phenomenological movement from Husserl to Merleau-Ponty.

475 Chinese Philosophy (5)

Prereq: 4 philosophy courses, including 371. Major Chinese philosophers and schools of thought from earliest times to present.

476 Indian Philosophy (5)

Prereq: 4 philosophy courses, including 370. Classical Hinduism.

477 Buddhist Philosophy (5)

Prereq: 4 courses, including 371. Abhidharma, Madhyamika, Yogacara, Zen, and other philosophical doctrines of Buddhism.

479 Religion Studies in Public Education (3)

Examination of differences between practice and study of religion, with special reference to Supreme Court decisions and place of religion courses in secondary school curricula.

491 Seminar in Philosophy (1-15, max 15)

Prereq: 5 philosophy courses. Selected problems.

497 Independent Reading (1-9, max 12)

Prereq: perm of chairman.

497T Philosophy Tutorial (1-10)

Prereq: Honors Tutorial College students only. (fall) 3rd yr tutorial studies in philosophy.

498T Philosophy Tutorial (1-10)

Prereq: Honors Tutorial College students only. (winter) 3rd yr tutorial studies in philosophy.

499 Senior Thesis (3-15)

Prereq: perm. Must be enrolled in each of three senior quarters to achieve honors in philosophy. Research and writing of long philosophical paper.

499T Philosophy Tutorial (1-10)

Prereq: Honors Tutorial College students only. (spring) 3rd yr tutorial studies in philosophy.

PHYSICAL THERAPY

410 Human Anatomy and Dissection (7)

Prereq: perm. Detailed study of gross structures of extremities and body wall with emphasis on musculoskeletal, neuromuscular, respiratory, and cardiovascular structures. Relationships of structure to normal and abnormal function stressed. Includes surface inspection, palpation, analysis of radiographic studies and dissection.

425 Principles of Clinical Teaching (4)

Prereq: perm. Application of educational theories, practices, and procedures to development, implementation, and evaluation of instructional programs for patients, families, community groups, physical therapy students, and health-care providers. Emphasis placed on unique demands imposed on education by consumer's health-care needs, clinical environment, and health-care organization and delivery.

426 Research Seminar (4)

Prereq: PSY 121. Application of research principles and procedures to critical analysis of physical therapy-related research literature; identification and development of a researchable problem in physical therapy.

431 Professional Role Issues (4)

Prereq: perm. Major philosophical and substantive issues confronting physical therapists and other professionals involved in health care delivery discussed. Includes historical perspectives, ethics, accreditation, legal requirements, and roles and responsibilities of various health-care disciplines. Course content developed around role problems.

441 Community Practice Problems I (3)

Prereq: perm. Participation in planning, development, delivery, and evaluation of patient care and administrative, educational, and consultative services in physical therapy or community health. Students assigned to variety of community-based physical therapy units and health-care agencies.

442 Community Practice Problems II (3)

Continuation of 441. See 441 for description.

443 Community Practice Problems III (3)

Continuation of 442. See 441 for description.

444 Community Practice Problems IV (3)

Continuation of 443. See 441 for description.

446 Community Practice Problems V (3)

Continuation of 444. See 441 for description.

448 Clinical Practicum I (8)

Prereq: Completion of all first-year program requirements, perm. Participation in planning, development, implementation, and evaluation of patient care and educational, administrative, and consultative services in affiliated physical therapy service units.

449 Clinical Practicum II (10)

Prereq: Completion of all required courses. Participation in planning, development, implementation, and evaluation of patient care and educational, administrative, and consultative services in variety of affiliated community-based physical therapy service units and health-care agencies.

451 Musculoskeletal Problems I (5)

Prereq: 410, perm. Presentation of patient problems involving musculoskeletal dysfunction commonly seen in physical therapy. Each problem incorporates content from basic, social, and clinical sciences, as well as physical therapy arts and sciences. Lecture, laboratory, and clinical experiences assist students in solving each problem.

452 Musculoskeletal Problems II (5)

Prereq: 410, 451, perm. Continuation of 451. Emphasizes musculoskeletal problems associated with hereditary factors, environmental factors, or disease.

454 Respiratory Problems (3)

Prereq: 410, 451, 452. Presentation of patient problems involving respiratory dysfunction commonly seen in physical therapy. Each problem incorporates content from basic, social, and clinical sciences and physical therapy arts and sciences. Lecture, laboratory, and clinical activities assist students in solving each problem.

455 Neuromuscular Problems I (5)

Prereq: 410, 451, 452, 454, 457, 459, or perm. Presentation of patient problems involving neuromuscular dysfunction associated with trauma or pathology of spinal or peripheral structures. Content of each problem incorporates basic, social, and clinical sciences and physical therapy arts and sciences. Lecture, laboratory, and clinical activities assist students in solving each problem.

456 Neuromuscular Problems II (5)

Prereq: 455 or perm. Continuation of 455. Focus on patient problems involving trauma or pathology, of known or unknown origin, to supra spinal structures of central nervous system.

457 Cardiovascular Problems (3)

Prereq: 410, 451, 452, 454. Presentation of patient problems involving cardiovascular dysfunction commonly seen in physical therapy. Each problem incorporates basic, social, and clinical sciences and physical therapy arts and sciences. Lecture, laboratory, and clinical activities assist students in solving each problem.

459 General Medical Surgical Problems (4)

Prereq: 410, 451, 452, 454. Presentation of general medical-surgical patient problems commonly seen in physical therapy. Each problem incorporates basic, social, and clinical sciences and physical therapy arts and sciences. Lecture, laboratory, and clinical activities assist students in solving each problem.

490 Independent Study (1-4)

Prereq: perm. Supervised study of selected topics in or related to physical therapy.

PHYSICS AND ASTRONOMY

The minimum requirement for the A.B. degree with a major in physics is 36 quarter hours, including a sequence of beginning courses, either 251, 252, 253, and 316 or 201, 202, 203 and 315, 316 (credit is not granted for both sequences). This degree is recommended for students who (1) want a general education with emphasis on physics; (2) have plans for further education or employment in an interdisciplinary area or desire a dual major in physics and chemistry, zoology, geological sciences, etc.; or (3) want to teach physics in high school. The requirements for option (3), for example, may be met by completing the physics major program listed under the *College of Education*.

The minimum requirement for the B.S. degree with a major in physics is 56 quarter hours. This must include a sequence of beginning courses, either 251, 252, 253, and 316 or 201, 202, 203 and 315, 316 (credit is not granted for both sequences). In addition, the following advanced courses are specifically required: 272, 273, 311, 312, 371, 372, 373, 411, 427, 428, 451, 452. The requirements in mathematics are 263A, 263B, 263C, 340, 440, 441. The Department of Physics and Astronomy also requires 12 quarter hours of natural sciences other than physics and mathematics for the B.S. degree.

The minor in physics consists of a minimum of 30 hours with 10 hours at or above the 300 level.

Students who plan to enter graduate study will find a recommended curriculum listed under "Preparation for Advanced

Training in Physics" in the *College of Arts and Sciences* Special Curricula Section. An applied physics program and programs for students interested in astronomy or meteorology are also listed under this section. Students planning to enter graduate study are urged to complete the foreign language requirement in German, French, or Russian. For English composition requirements, see the *College of Arts and Sciences* Section.

Selected students may enroll in the physics tutorial program through the Honors Tutorial College. Students in this program have the option of taking engineering physics for which a curriculum is listed under the *Honors Tutorial College* Section.

Completion of the requirements for either the A.B. or B.S. degree program above completes the Arts and Sciences College requirement of at least nine hours in the major at the junior-senior level.

All students interested in pursuing any of the physics programs described above should contact the chairman of the Department of Physics and Astronomy.

Astronomy

100 Survey of Astronomy (4) (2N)

Nontechnical course requiring no mathematics background. Topics covered: origins and history of astronomy; risings and settings of sun, moon, and stars for various latitudes; causes of seasons and tides; physical properties of planets and their moons; comets, meteors, and meteorites; sun and stars; origin and evolution of stars; structure of our galaxy; pulsars; quasars; galaxies; expanding universe; cosmology. Also listed as PSC 100. 4 lec.

100B The Universe (4) (2N)

Designed for nonscience majors with minimal mathematical background. Descriptive study of astrophysical universe. Fundamental concepts and physical principles; life cycles of stars; explanation of recent findings including pulsars, quasars, and black holes; theories of cosmology describing beginning and end of our universe. Other possible topics include UFOs, space exploration, and possibility of extraterrestrial life. Also listed as PSC 100B. 4 lec.

100D Moons and Planets: The Solar System (4) (2N)

Look at solar system, sun, moons, and planets, through eyes of modern science. Space program, Apollo to present, and what we have learned from it. Selected readings and NASA films. 4 lec. Also listed as PSC 100D.

300 The Solar System (3)

Prereq: mathematics through trigonometry, and elementary physics. Apparent motions of sun, moon, planets, and stars. Relations between apparent positions of celestial objects and time, latitude and longitude of observer. Principles of navigation. Temperatures, atmospheres, and surface conditions of other planets. Life on other planets.

301 Sun and Stars (3)

Prereq: 300. Review of radiation laws as needed in astronomy. Physical properties and energy generation in sun. Origin and evolution of solar system. Methods of determining diameters, temperatures, densities, and composition of stars.

302 Stars and Galaxies (3)

Prereq: 301. Variable stars, novae, supernovae, pulsars, neutron stars, and black holes. Origin and evolution of stars. Structure of our galaxy. Physical properties of other galaxies, and their arrangement in space. Quasars. Expansion of universe. Theories of cosmology.

310 Astronomy Laboratory (1)

Prereq: 300 or with 300. Observational work at telescope. Computations of coordinates of celestial objects. Practice with marine sextant and aviation octant. Solution of navigation problems.

311 Astronomy Laboratory (1)

Prereq: 300 and 310. Observational work at telescope, with emphasis on moon and planets. Measurement of astronomical photographs and spectrograms. Reduction of astronomical data.

312 Astronomy Laboratory (1)

Prereq: 301 and 311. Observational work at telescope, with emphasis on stars, nebulae, and galaxies. Measurement of stellar spectrograms for determination of radial velocity. Spectroscopic measurement of velocities of recession of galaxies and quasars.

320 Elements of Navigation (2)

Prereq: 300, mathematics through trigonometry. (on demand) Basic navigational astronomy; use of sextant and nautical almanac; line-of-position method as used in air and surface navigation.

350 Celestial Mechanics (4)

Prereq: 301, differential equations. (on demand) Differential equations of planetary motion; vector treatment of 2-body problem; determination of orbits of planets and satellites.

450 Studies in Astronomy (1-6, arranged)

Prereq: 302.

Physical Science

100 Survey of Astronomy (4) (2N)

Nontechnical course requiring no mathematics background. Topics covered: Origins and history of astronomy; risings and settings of sun, moon, and stars for various latitudes; causes of seasons and tides; physical properties of planets and their moons; comets, meteors, and meteorites; sun and stars; origin and evolution of stars; structure of our galaxy; pulsars; quasars; galaxies; expanding universe; cosmology. Also listed as ASTR 100. 4 lec.

100A Science and Society (4)

Investigations of nature of science and its methods in obtaining knowledge and laws of our total environment. Seeks understanding of basic nature of science and builds comprehension of how science is relevant to humans and society. 3 lec, discussion.

100B The Universe (4) (2N)

Designed for nonscience major with minimal mathematical background. Descriptive study of astrophysical universe. Fundamental concepts and physical principles; life cycle of stars; explanation of recent findings including pulsars, quasars, and black holes; theories of cosmology describing beginning and end of our universe. Other possible topics include UFOs, space exploration and possibility of extraterrestrial life. Also listed as ASTR 100B. 4 lec.

100C The Atom and Its Nucleus (3)

Nonmathematical description of basic structure of atoms and nuclei with special emphasis on impact of nuclear physics on 20th-century humans. Applications of modern physics in art, archaeology, medicine, and social problems. 3 lec.

100D Moons and Planets: The Solar System (4) (2N)

Look at solar system, sun, moons, and planets, through eyes of modern science. Space program, Apollo to present, and what we have learned from it. Selected readings and NASA films. 4 lec. Also listed as ASTR 100D.

101 Physical World (4) (2N)

Designed for nonscience majors. Fundamental ideas of measurement, motion, energy, electricity and magnetism, heat, atomic and nuclear physics. Introduction to relativity and quantum phenomena. 4 lec.

101L Physical World (5) (2N)

Designed for nonscience majors. Fundamental ideas of measurement, motion, energy, electricity and magnetism, heat, atomic and nuclear physics. Introduction to relativity and quantum phenomena. 4 lec, 2 lab.

105 Color, Light, and Sound (4) (2N)

Designed for nonscience majors. Physical nature of light and sound, including transmission, absorption, reflection, interference, and resonance. Applications include analysis of musical instruments, acoustics, optical systems, perception of color and sound. 4 lec.

105L Color, Light, and Sound (5) (2N)

Designed for nonscience majors. Physical nature of light and sound, including transmission, absorption, reflection, interference, and resonance. Applications include analysis of musical instruments, acoustics, optical systems, perception of color and sound. 4 lec, 2 lab.

111 The Metric System (1)

Introduction to International (Metric) System of Units (SI) through lecture and laboratory experience. Topics include: history of and rationale for SI; SI and its rules for use; metric computation and conversion techniques. Not offered on Athens campus.

121 Physical World (3) (2N)

Designed for nonscience majors. Fundamental ideas of measurement, motion, energy, sound, light, electricity and magnetism, and astronomy. Topics in astronomy include solar system, time, moon phases, tides, eclipses, sun, and galaxies. 3 lec. Not offered on Athens campus.

121L Physical World (4) (2N)

Designed for nonscience majors. Fundamental ideas of measurement, motion, energy, sound, light, electricity and magnetism, and astronomy. Topics in astronomy include solar system, time, moon phases, tides, eclipses, sun, and galaxies. 3 lec, 2 lab. Not offered on Athens campus.

122 Physical World (3) (2N)

Prereq: 101 or equiv. Designed for nonscience majors. Fundamental ideas of heat, nuclear physics, atomic physics, and chemistry. Topics in chemistry include classification of elements, molecules, chemical reactions, solutions, and large molecules, including plastics and DNA. 3 lec. Not offered on Athens campus.

122L Physical World (4) (2N)

Prereq: 101 or equiv. Designed for nonscience majors. Fundamental ideas of heat, nuclear physics, atomic physics, and chemistry. Topics in chemistry include classification of elements, molecules, chemical reactions, solutions, and large molecules, including plastics and DNA. 3 lec, 2 lab. Not offered on Athens campus.

123 Physical World (3) (2N)

Prereq: 101 or equiv. Designed for nonscience majors. Fundamental ideas of meteorology and geology. Topics in meteorology include atmosphere, winds, clouds, storms, and weather. Topics in geology include rocks and minerals, gradation, earthquakes, continental drift, and ocean. 3 lec. Not offered on Athens campus.

123L Physical World (4) (2N)

Prereq: 101 or equiv. Designed for nonscience majors. Fundamental ideas of meteorology and geology. Topics in meteorology include atmosphere, winds, clouds, storms, and weather. Topics in geology include rocks and minerals, gradation, earthquakes, continental drift, and ocean. 3 lec, 2 lab. Not offered on Athens campus.

Physics

201 Introduction to Physics (4) (2N)

(fall, winter) 1st course in physics; open to students from all areas. Students should have high school level algebra and trigonometry, but no calculus required. Recommended for students in liberal arts, architecture, industrial technology, botany, geological sciences, and premedicine. Lec with demonstrations and lab. Mechanics of solids and liquids, waves and sound. 3 lec, 2 lab.

202 Introduction to Physics (4) (2N)

Prereq: 201. (winter, spring) Continuation of 201. Open to students from all areas. Students should have high school level algebra and trigonometry, but no calculus required. Recommended for students in liberal arts, architecture, industrial technology, botany, geological sciences, and premedicine. Lec with demonstrations and lab. Includes electricity, magnetism, heat, thermodynamics, and light. 3 lec, 2 lab.

203 Introduction to Physics (4) (2N)

Prereq: 202. (spring, fall) Continuation of 202. Open to students from all areas. Students should have high school level algebra and trigonometry, but no calculus required. Recommended for students in liberal arts, architecture, industrial technology, botany, geological sciences, and premedicine. Lec with demonstrations and lab. Includes relativity, quantum, atomic, and nuclear physics. 3 lec, 2 lab. Note: Students who complete 201-202-203 sequence and wish to take higher-level physics course should take 315 in preparation for other 300-level and above courses. Credit is not given for 201-202-203 and 251-252-253 sequences together.

211 The Universe (3)

Prereq: 9 hrs of physics or physical science or perm. Descriptive study of astrophysical universe. Fundamental physical principles, evolution of stars, pulsars, quasars, and recent theories of cosmology. 3 lec.

251 General Physics (5) (2N)
Prereq: MATH 263A. Classical physics with calculus and vectors. Newtonian mechanics, rotational dynamics, gravitation. 3 lec, 2 lab, 1 recit.

252 General Physics (5) (2N)
Prereq: 251 and MATH 263B. Classical physics with calculus and vectors. Wave phenomena, optics, thermal properties of matter, heat, and thermodynamics. 3 lec, 2 lab, 1 recit.

253 General Physics (5) (2N)
Prereq: 252. Classical physics with calculus and vectors. Electricity and magnetism. 3 lec, 2 lab, 1 recit.

270 Special Studies (1-4)
Prereq: perm. Special studies in physics under supervision of faculty member.

272 Electronics Laboratory (2)
Prereq: 202, or 253, and Physics major, or perm. (winter) Circuit analysis, electronic measurements, semiconducting devices and instrumentation from DC to microwaves. 4 lab.

273 Electronics Laboratory (2)
Prereq: 272 and Physics major or perm. (spring) Circuit analysis, electronic measurements, semiconducting devices, and instrumentation from DC to microwaves. 4 lab.

297T Physics Tutorial (1-15)
Prereq: Honors Tutorial College students only. (fall) 1st-yr tutorial studies in physics.

298T Physics Tutorial (1-15)
Prereq: Honors Tutorial College students only. (winter) 1st-yr tutorial studies in physics.

299T Physics Tutorial (1-15)
Prereq: Honors Tutorial College students only. (spring) 1st-yr tutorial studies in physics.

303 Digital Computing Methods in Physics (4)
Prereq: physics major or perm. Practical computer programming (FORTRAN, etc.) with special emphasis on problems in physics. 4 lec.

311 Mechanics (4)
Prereq: 253 or 315; MATH 340. (fall) Fundamentals of physical mechanics using vector analysis and ordinary differential equations. Particle dynamics, accelerating reference systems, central forces and celestial mechanics.

312 Mechanics (4)
Prereq: 311. (winter) Continuation of 311. Many-particle systems, rigid body dynamics, Lagrangian methods, and small oscillations.

315 Intermediate Physics for Scientists and Engineers (4)
Prereq: 201, 202, 203 or equiv and calculus. (winter) Review of mechanics and general physics with emphasis on application of calculus and vector analysis. Intended for students who have had thorough noncalculus physics course and approximately 1 yr of calculus. PHYS 201, 202, 203 followed by 315 accepted as equiv to calculus-level physics: PHYS 251, 252, 253. 3 lec, 1 recit.

316 Contemporary Physics for Scientists and Engineers (3)
Prereq: 253, 315, or EE 321. Introduction to quantum theory and relativity; selected topics in atomic, nuclear, and solid state physics. 3 lec. Intended to follow classical physics with calculus: either 253 (252 for electrical engineering majors) or 315.

371 Intermediate Laboratory (Electrons) (2)
Prereq: 316 (or with 316) or perm. Fundamental experiments on electron properties including charge and mass, wave properties, atomic binding, spin and conduction.

372 Intermediate Laboratory (Photons) (2)
Prereq: 316 or perm. (winter) Experiments in optics, lasers, x-rays, and spectroscopy. 4 lab.

373 Intermediate Laboratory (Nucleons) (2)
Prereq: 316 or perm. (spring) Proton and neutron scattering and reactions. Neutron activation analysis. Principles and operation of radiation detectors and charged particle accelerator. 4 lab.

397T Physics Tutorial (1-15)
Prereq: Honors Tutorial College students only. (fall) 2nd-yr tutorial studies in physics.

398T Physics Tutorial (1-15)
Prereq: Honors Tutorial College students only. (winter) 2nd-yr tutorial studies in physics.

399T Physics Tutorial (1-15)
Prereq: Honors Tutorial College students only. (spring) 2nd-yr tutorial studies in physics.

411 Thermodynamics (4)
Prereq: 253 or 315, MATH 340. (fall) 1st and 2nd laws of thermodynamics, phase changes, and entropy. Temperature, thermodynamic variables, equations of state, heat engine. 3 lec.

412 Kinetic Theory and Statistical Mechanics (4)
Prereq: 411. (winter) Kinetic theory, transport phenomena of gases, and introduction to classical and quantum statistics. 3 lec.

420 Acoustics (3)
Prereq: 312 or perm, MATH 340. (spring) Vibration, sound radiation, sound propagation, and practical aspects of sound. 3 lec. Offered odd years.

423 Geometrical and Physical Optics (4)
Prereq: 253, MATH 340, or perm. Reflection, refraction, lenses, polarization, birefringence, interference, diffraction, coherence, and selected introductory topics in modern optics. 4 lec.

427 Electricity and Magnetism (4)
Prereq: 253 or 315; MATH 340 and 440. (fall) Circuits and electric and magnetic fields. Topics on field sources, potentials, Gauss' law, polarization and dielectrics, magnetic induction. 3 lec.

428 Electricity and Magnetism (4)
Prereq: 427. (winter) Electric and magnetic fields. Topics on magnetic potentials, magnetic forces, Faraday law, magnetic materials, capacitance and inductance, energy of charge and current distributions, time-varying current. 3 lec.

429 Electromagnetism and Relativity (3)
Prereq: 428. (spring) Advanced topics in electromagnetism; Maxwell's equations and electromagnetic waves; special relativity and Lorentz transformation. 3 lec.

451 Quantum Physics (4)
Prereq: 316 or perm. (fall) Quantum effects in atomic and molecular physics; basic ideas of quantum mechanics; solutions to Schrodinger equations for simple systems. 3 lec.

452 Quantum Physics (4)
Prereq: 451; MATH 441 (may be taken concurrently). (winter) Quantum effects in atomic physics; identical particles and Pauli principles; application of quantum mechanics to interpretation of atomic spectra and structure. 3 lec.

453 Nuclear and Particle Physics (4)
Prereq: 452. (spring) Descriptive treatment of nuclear phenomena. Elementary theory of nucleon-nucleon interaction. Systematics of nuclear structure (shell model and collective model). Properties and interactions of fundamental particles. Devices and techniques of nuclear and high energy physics. 3 lec.

470 Special Problems (1-4)
Prereq: 22 hrs. Supervised research problems of limited scope in experimental and theoretical physics.

471 Solid State Physics (4)
Prereq: 452, 412. (spring) Fundamental properties of solid state of matter. 3 lec. Offered even yrs.

475 Advanced Laboratory (1 hr per sec, max 3)
Prereq: 373 or perm. Wide selection of experiments from many areas of physics. Limit of 2 students per section. Student may select up to 3 different sections each qtr.

490H Honors Thesis (1-6)
Prereq: Honors tutorial students or departmental honors candidates only. Perm of director of honors studies. Supervised research work in physics, astronomy, or engineering physics, intended for submission for undergrad honors.

493 Undergraduate Seminar (1)
Prereq: jr rank. Important areas of current interest in field of physics, history of physics, development of ideas in physics, and other aspects of physics.

497T Physics Tutorial (1-15)

Prereq: Honors Tutorial College students only. (fall) 3rd-yr tutorial studies in physics.

498T Physics Tutorial (1-15)

Prereq: Honors Tutorial College students only. (winter) 3rd-yr tutorial studies in physics.

499T Physics Tutorial (1-15)

Prereq: Honors Tutorial College students only. (spring) 3rd-yr tutorial studies in physics.

POLITICAL SCIENCE

The major requirement for the A.B. degree is a minimum of 45 hours including POLS 101 and either 102 or 103. Majors must also take at least one course at the 200 level or above in four of the following five areas: American politics, comparative politics, international relations, political theory, public administration. Fulfillment of this distribution requirement also guarantees completion of the requirement of the College of Arts and Sciences of nine hours at the junior-senior level. The distribution requirement for a minor in political science is the same as for the major but the total number of hours required is 24.

American politics includes: 304, 306, 320, 323, 374, 390, 401, 402, 404, 405, 406, 409, 415, 417, 418, 420, 471, 476A, 476B; comparative politics: 230, 331, 333, 340, 429, 432, 433, 434, 435, 436, 437, 438, 439, 441, 445, 446, 447A, 447B, 448, 479; international relations: 250, 351, 354, 427, 433, 452, 455, 456, 459, 461, 463; political theory: 270, 371, 372, 373, 374, 471, 474, 475, 476A, 476B, 478, 479, 481, 482, 485; public administration: 210, 408, 409, 410, 411, 412, 413, 414, 422, 423, 424, 427, 429, 495.

101 American National Government (4) (2S)

Constitutional basis and development, political processes, and organization of American national government.

102 Issues in American Politics (4) (2S)

Prereq: 101. Continuation of 101. Concerned with administration and policy making processes of national government in selected areas, e.g., welfare, civil rights, defense, etc.

103 The United States in World Affairs (4) (2S)

Designed to introduce students to some major problems confronting U.S. in world arena and to ways in which these problems have been and are being dealt with. Will include examination of context in which American foreign policy is formulated and carried out as well as of some political, economic, military, and technological issues involved in working within increasingly interdependent world.

210 Principles of Public Administration (4) (2S)

D. Beals, M. Weinberg. Introduction to role and operation of public agencies in American society. Examines organization of federal, state, and local bureaucratic systems, their interrelations, and their basic principles, functions, and tasks.

230 Comparative Politics (4) (2S)

E. Baum, D. Williams. Introduction to dynamics, structures, and comparison of contemporary political systems and processes.

250 International Relations (5) (2S)

R. Bald, S. Kim, H. Molineu. Contemporary international system and major forces and conditions which affect current international politics. Special emphasis on role of conflict and need for peaceful conflict resolution.

270 Political Theory (4) (2S)

F. Henderson. Introduction to study of political theory; examination of selected political issues from philosophical perspective.

304 Politics in the American States (5)

Prereq: 101-102. Comparative analysis of state political systems. Emphasis on structure and process of policy-making of states within federal context.

396 Politics of Appalachia (4) (2S)

Prereq: 101 or perm. *J. Huntley.* Introduction to Appalachia, its political patterns, and political problems, such as politics of poverty and powerlessness. Includes examination of responses to these problems by various levels of government — national, regional, state, and local.

320 Urban Politics (5) (2S)

Prereq: 101-102 or perm. *J. Barnes.* Examination of role of values in urban politics focusing on their relationship to urban problems, structure and functions of municipalities, urban professionalism, and alternative urban arrangements.

323 Black Politics in the United States (4) (2S)

Prereq: 101 or perm. Appraisal of economic and institutional structure of American society through social doctrines enunciated by black political theorists, which serve as inspiration and ideology for black political movements. Examines socio-political societies in various parts of Africa and interprets black political movements in cultural, philosophical, ideological, and technological terms. Not open to those who have had AAS 323.

331 Politics in Western Europe (4) (2S)

W. Elsbree, R. Bald. Government and politics in several West European nations.

333 Politics in the Soviet Union (4) (2S)

D. Williams. Introduction to political development, ideology, institutions, and contemporary politics of U.S.S.R.

340 The Politics of Developing Areas (4) (2T)

F. Gagliano. Major theories and problems of political, socio-cultural, and economic development in new nations of Asia, Africa, and Latin America, with special emphasis on heritage of colonialism, struggle for independence, and political adjustments to rapid social and technological change.

351 Current International Problems (4) (2S)

R. Bald, S. Kim, H. Molineu. Selected case studies, crises, and issues illustrating major problems of contemporary international politics.

354 American Foreign Policy (5)

Prereq: 103 or 250 or perm. *H. Molineu.* Consideration of problems involved in formulation and execution of foreign policy. Particular emphasis on contemporary problems of American policymakers.

371 Ancient and Medieval Political Thought (5)

Prereq: 270 or perm. *J. Huntley.* Major figures and basic concepts characteristic of political thought in ancient and medieval periods. Emphasis on original works of Plato, Aristotle, St. Augustine, St. Aquinas and on developing one's own political values and theories.

372 Modern Political Thought (5) (2S)

Prereq: not open to fr. *F. Henderson, R. Hunt.* Basic philosophic conceptions of modern nation state. Utilizing original works, evolution of nation state traced through philosophical literature from its Renaissance origins. Attention focused on both formative and critical perspectives, such as those of Machiavelli, Rousseau, and Emma Goldman with emphasis upon evaluation of norms associated with modern state.

373 Contemporary Political Thought (5) (2S)

Prereq: not open to fr. *F. Henderson, R. Hunt.* 19th- and 20th-century political theory. Focus on such contemporary philosophical and political issues as emergence of European socialist tradition, origins of human aggression, and human alienation. Attention given to selected theorists such as Marx, Freud, Gandhi, and Sartre.

374 Great Jurists (4) (2S)

Prereq: not open to fr. *F. Henderson.* Analysis of life, legal writings, and thought of prominent jurists such as Taney, Frankfurter, Harlan, Marshall, Douglas, and Learned Hand.

390 Political Workshop (10-15)

Prereq: 101 and perm. (offered fall qtr of even-numbered years) *A. Priskey.* Intensive analysis of political organizations and campaigning combined with field experience in campaigning.

401 American Constitutional Law (4)

Prereq: 14 hrs political science or history. *R. Gusteson.* Principles underlying American constitutional government. Consideration of leading cases with reference to interpretation of U.S. Constitution.

402 American Constitutional Law (4)

Prereq: 14 hrs political science or history. Continuation of 401. See 401 for description.

404 Civil Liberties (4)

Prereq: jr or sr rank. *F. Henderson*. Examination of selected civil liberties issues such as freedom of expression, human and political equality, rights of criminally accused, and rights of indigent.

405 American Political Parties (4)

Prereq: 11 hrs. *R. Gusteson*. Origin, growth, organization, and methods of parties; suffrage, nominations, and elections; role of parties in democracy.

406 Elections and Campaigns (4)

Prereq: 11 hrs of political science. *P. Richard*. Examines nature of voter and rationality of voter decisions; impact of campaigns and their influence on election outcomes; techniques used in political campaigns; and role of elections in American society.

408 Urban Public Administration (4)

Prereq: 411 or perm. Examines administration of urban programs. Focuses on agency-client relationships, professionalism, and public service delivery.

409 Law Enforcement (5)

Prereq: 11 hrs or perm. Role, function, and problems of American judicial, prosecutory, policing, and correctional systems in political process. Crime and law as functions of social and political systems. Examination of relationship of law and social change in industrialized, urbanized, and technical society.

410 Public Policy Analysis (4)

Prereq: 101-102. *E. Baum, M. Weinberg*. Analysis of policy process: formulation, implementation, and evaluation. Examines policy areas such as energy, health, economic development.

411 Public Administration (4)

Prereq: 11 hrs or perm. *E. Collins, E. Baum*. Development of administrative organizations, current ideas in organizational theory, nature of federal bureaucracy, fiscal management, and control of administrative action.

412 Public Personnel Administration (4)

Prereq: 11 hrs. *E. Collins, E. Baum*. Philosophy, problems, and procedures of public personnel management: recruitment, training, promotion policies, position classification, and employer-employee relations.

413 Administrative Law (5)

Prereq: 11 hrs. *E. Collins*. Organization, functions, and procedures of selected national regulatory agencies; principles affecting administrative discretion, administrative power over private rights, enforcement, and judicial control of administrative decisions.

414 Organization Theory and Politics (4)

Prereq: 210 or 411 or equiv. *M. Weinberg*. Examination of public organizations. Presents major theories of organizations in public administration. Public management cases examined to illustrate major theories.

415 The American Presidency (4)

Prereq: 11 hrs. *R. Gusteson*. Analysis of office of national chief executive and its place in American political system. Attention given to constitutional status and powers, functional development, and interrelationship of person and office.

417 Legislative Processes (5)

Prereq: 11 hrs. *P. Richard*. Explores legislative process and policy, primarily at national level. Examines influence of interest groups, constituencies, political parties, executive branch, and organizational structure of Congress on legislative outcomes.

418 Interest Groups in American Politics (5)

Prereq: 11 hrs. Organization and tactics of pressure groups and their impact on policy-making process.

420 Women, Law, and Politics (4)

Prereq: jr rank or perm. *P. Richard*. Focuses on political and legal position of women in U.S. Covers women's legal status, feminist movement, current issues, and public policy responses concerning women's position such as Equal Rights Amendment, marriage and divorce laws, affirmative action, and abortion.

422 Financial Issues in Government (4)

Prereq: 411 or equiv or perm. *M. Weinberg*. Examines financial aspects of government organizations with special focus on financial issues for state and local governments. Financial conditions of these governments discussed in conjunction with various actions governments take to deal with them.

423 Public Budgeting (4)

Prereq: 210 or 411 or perm. *M. Weinberg*. Examines purpose, techniques, and consequences of public budgeting processes at federal, state, and local levels.

424 Intergovernmental Relations (4)

Prereq: 411 or perm. Examines intergovernmental fiscal patterns between federal-state-local governments and impact of fiscal transfers on local budgeting and finance administration. Includes analysis of nonfiscal patterns such as federal program requirements, their impact on local administrative processes, and other pressures on local budgeting and finance.

427 Formulation of American Foreign Policy (5)

Prereq: 103 or 354 or perm. *H. Molineu*. Covers institutional and administrative as well as political and more informal processes whereby foreign policy decisions are formulated and implemented in U.S.

429 Comparative Public Administration (4)

Prereq: 210 or 230 or perm. *E. Baum, D. Williams*. Examines and compares characteristics of public administrative systems in various national political settings.

432 Policy-making in the U.S.S.R. (5)

Prereq: 333 or course in Soviet history or perm. *D. Williams*. Examination of how Soviet leadership deals with number of major domestic problems.

433 Soviet Foreign Policy (5)

Prereq: 333 or perm. *D. Williams*. Analysis of foreign policies of U.S.S.R. Historical, ideological, strategic, and other influences covered.

434 Government and Politics of Latin America (4)

Prereq: jr or sr rank. *T. Walker*. Political systems of Latin America. Emphasis on power relationships and political obstacles to change in contemporary Latin America.

435 Revolution in Latin America (4)

(2T)

Prereq: jr or sr rank. *T. Walker*. Revolution as theoretical concept and as practical reality in several Latin American countries. Special emphasis on Cuban and Nicaraguan revolutions.

436 The Politics of Brazil (4)

(2T)

Prereq: jr or sr rank or perm. *T. Walker*. Emphasis on 20th-century politics, particular relationship between patrimonial society and political institutions. Important power contenders such as military, church, landed aristocracy, industrial elite, bureaucracy, labor, and peasantry examined.

437 British Parliamentary Pattern (4)

Prereq: 11 hrs or perm. *W. Elsbree, D. Williams*. Political institutions and processes in Britain and impact of British pattern on 1 or more other countries.

438 Government and Politics of Germany (5)

Prereq: 11 hrs including 331 or perm. *R. Bald*. Major political processes, personalities, and institutions of contemporary West Germany, including key foreign policy issues.

439 Politics in France (4)

Prereq: 11 hrs or perm. *J. Barnes*. Major political processes, personalities, ideas, and institutions of modern France.

441 Government and Politics of Africa (5)

Prereq: 8 hrs political science or history. *E. Baum*. Development and structure of modern African states with emphasis on political processes in tropical Africa.

445 Government and Politics of Japan (4)

Prereq: 11 hrs of political science or Asian history. *W. Elsbree*. Political institutions and processes of Japan with emphasis on developments since 1945.

446 Government and Politics of China (4)

Prereq: 11 hrs of political science or Asian history. *W. Elsbree*. Political institutions and processes and major political developments in modern China.

447A Government and Politics of Southeast Asia (4)

(2T)

Prereq: 11 hrs political science or history. *P. van der Veur*. From ancient empires to western colonial rule, rise of nationalism, and arrival of independence in post WW II period. Main emphasis on political developments in Indonesia and Philippines.

447B Government and Politics of Southeast Asia (4) (2T)

Prereq: 11 hrs political science or history. Continuation of 447A but can be taken independently. Period of independence since WW II with main emphasis on political developments in Indonesia and Malaysia.

448 Politics of Southeast Asia (4)

Prereq: by perm only. *P. van der Veur*. Discusses and analyzes various aspects of major themes such as nationalism, colonialism, political succession, national integration, corruption, etc.

450H Honors in Political Science (5, max 20)

Prereq: acceptance in departmental honors program. Seminar on selected aspects of political science and approaches to study of politics to be followed by research for honors thesis.

452 Advanced International Relations (5)

Prereq: 250 or perm. *H. Molineu, S. Kim, R. Bald*. In-depth analysis of various aspects of international relations including major theoretical approaches to study of international relations.

455 International Law (5)

Prereq: 250 or perm. *S. Kim*. Role of international law in interstate relations and international organization.

456 International Organizations (5)

Prereq: 250. *S. Kim*. Analysis of nature, development, structure, and functions of international organizations with particular emphasis on United Nations.

459 Arms Control and Disarmament (5)

Prereq: 11 hrs or perm. *R. Bald*. Examines military force in nuclear age with special emphasis on strategy of nuclear deterrence; history of disarmament negotiations since WW II; arms control agreements; and case studies in current U.S.-Soviet arms control negotiations.

461 Weak States in World Politics (5)

Prereq: 250, 340, or perm. *E. Baum*. Detailed examination of impact of new states on international relations. Particular attention given to problems and foreign policies of new states.

463 The United States and Africa (5)

Prereq: 103 or 250 or 354. *E. Baum*. Origins and nature of American relations with African states, with emphasis on current American interests and policy.

471 Legal Theory and Social Problems (4)

Prereq: 12 hrs political science or perm. *F. Henderson*. Examination of legal reasoning and normative values of judges, lawyers, legal theorists, and quasi-judicial bodies in shaping legal solutions to contemporary social problems.

474 19th Century Political Thought (4)

Prereq: 15 hrs political science or European history. *W. Elsbree*. Movements in 19th-century political thought in Europe; liberalism, socialism, irrationalism among subjects covered.

475 Studies in Political Thought (5)

Prereq: 1 course in political thought or perm. *F. Henderson, R. Hunt*. Selected topics in political theory; e.g., anarchism, socialism, democratic theory, technology and politics, etc. Consult department for information pertaining to current course description and schedule.

476A American Political Thought (4)

Prereq: 11 hrs of political science or history. *A. Pringley*. Origin and development of political ideas from colonial period through slave controversy.

476B American Political Thought (4)

Prereq: 11 hrs of political science or history. *A. Pringley*. Continuation of 476A but can be taken independently. Begins with Social Darwinism and concludes with contemporary political ideas in America.

478 Feminist Political Thought (4)

Prereq: jr or sr rank. *J. Huntley*. Examines relationship between feminist thought and women's movement. Deals with topics such as emergence of feminist political thought, its antecedents, and current writings.

479 Latin American Political Thought (4) (2T)

Prereq: 11 hrs. *T. Walker*. Evolution of Latin American political thought from conquest to present. Major emphasis on 20th-century movements such as Democratic Left, Progressive Catholic Left, and Marxist Revolutionary Left.

481 Modern Political Analysis (5)

Prereq: 20 hrs, perm. *D. Dabelko*. Examination of problems of knowledge in social sciences with particular emphasis on political science. Analysis of major theories or approaches developed in political science recently.

482 Quantitative Political Analysis (5)

Prereq: 481 or perm. *D. Dabelko*. Designed to show relevance of scientific research techniques to study of politics.

485 Personality and the Political Process (5)

Prereq: 15 hrs or perm. *D. Dabelko*. Relevance of personality characteristics, psychological mechanisms, and life history factors in explaining political behavior. Topics are behaviorism, psychoanalytic theory, authoritarianism, dogmatism, and other personality traits as related to political beliefs and behavior.

490 Studies in Political Science (3-5)

Prereq: 11 hrs, perm. Intensive study of special topics in field of political science, including American government and politics, comparative government, international relations, political theory, and public administration.

491 Research in Political Science (1-5, max 10)

Prereq: 18 hrs and advance perm of instructor. Research in selected fields of political science.

495 Public Affairs Internship (1-15)

Prereq: perm only. *E. Baum*. Provides qualified students with opportunity to learn through working in selected public and private agencies.

498 Problems in Political Science (1-5, max 10)

Prereq: 18 hrs and advance perm of instructor. Research or directed reading based on student's special interest.

PORTUGUESE

See Foreign Languages and Literatures.

PSYCHOLOGY

The Psychology Department offers both a major and a minor program. The major requirement for the A.B. degree in psychology consists of a minimum of 50 quarter hours and a maximum of 72 hours. PSY 101, 121, and 226 are required. In addition, a minimum of two courses is required from each of the following four areas: (A) 273, 275, 315, 374, 376, 390*, 490**; (B) 301, 303, 304, 307, 311, 312, 314, 327, 390*, 490**; (C) 310, 332, 333, 351, 390*, 490**; (D) 241, 261, 335, 336, 337, 390*, 490**. At least four courses must be completed at the 300 level or above. PSY 321 is highly recommended for all psychology majors, particularly those who plan to attend graduate school.

The minor in psychology consists of a minimum of 30 hours with at least two courses at the 300 level. PSY 101 is required. In addition, at least one course is required from each of the following four areas: (A) 273, 275, 315, 374, 376, 490**; (B) 121, 226, 301, 303, 304, 307, 311, 312, 314, 327, 490**; (C) 310, 332, 333, 351, 490**; (D) 241, 261, 335, 336, 337, 490**.

In addition to the regular major and minor options, programs leading to teacher certification in psychology are available. Students may receive minor certification to teach social psychology at the secondary school level by meeting the following requirements: (A) completing certification requirements in a major teaching field (for complete specification of these fields contact the College of Education) and (B) completing the following courses in psychology: 101, 121, 226, 304, 333, 336, and one course from the following: 241, 261, 273, 310, 312, 335, 376, or 490 seminars in social or developmental psychology.

A limited number of students may receive major certification to teach social psychology at the secondary level by the following process: (A) completing the following courses in psychology: 101, 121, 226, 241, 304, 333, 336; at least two courses from the following: 273, 275, 307, 315, 374, 376; at least one course from the following: 311, 312, 314, 327; and at least one course from the following: 261, 310, 332, 335, 490 seminars in social or organizational psychology; (B) completing minor certification in some second teaching field.

For further information on the program, criteria for acceptance, and procedures for application, check with the Department of Psychology or the College of Education.

A psychology-prephysical therapy major is also available. Required courses are listed under Preparation for Physical Therapy, Plan D, in the *Arts and Sciences Special Curricula* section of this catalog.

For qualified students, the department offers both a departmental honors program and an honors tutorial program. General descriptions of these two programs may be found in the *Honors Tutorial College* section of this catalog. A detailed description of the psychology honors program is available from the Psychology Department. Students should apply to the assistant chairperson for undergraduate affairs for admission to departmental honors. A detailed description of the psychology honors tutorial program is available from either the Psychology Department or the Honors Tutorial College. Students should apply to the Honors Tutorial College for admission to the psychology tutorial program.

Requirements for all psychology programs are structured to provide students with exposure to several areas of psychology while providing latitude in selecting courses to fit students' needs and interests. Students are encouraged to consult their academic advisors early in their programs to plan appropriate course selections. Early consultation with an advisor is particularly recommended for students who are considering graduate work in psychology.

At the graduate level, the department offers doctoral programs in clinical and experimental psychology and master's programs in experimental and school psychology. Students who are interested in pursuing a graduate degree in the department may receive a brochure and additional information about the graduate programs from the assistant chairperson for graduate affairs.

*390 research hours may be applied only once and to only one area. At least four hours of 390 must be completed before it can be used to count for an area requirement; however, it is not necessary to earn all four hours at one time.

**490 seminars may be applied to these area requirements if approved by the assistant chairperson for undergraduate affairs.

101 General Psychology (5) (2S)
Introduction to psychology dealing primarily with learning, sensory processes, social and clinical psychology.

121 Elementary Statistics for the Behavioral Sciences (5) (1M)
Prereq: Tier I math placement or MATH 101. Measures of central tendency, variability, correlation; sampling distributions and statistical inference; simple tests of hypotheses. Formats of instruction differ with instructors.

190 Workshops in Applied Psychology (1-2, max 5)
Workshops on specific topics in applied psychology, offered yearly, carrying predetermined alphabetical designations (e.g., 190A). Students seeking academic credit must complete satisfactorily written project determined by instructor. Graded credit/no credit.

226 Experimental Psychology (4)
Prereq: 121. Training in scientific methods and techniques of modern experimental psychology with individual reports of experiments.

231 Psychology of Adjustment (4) (2S)
Prereq: 101. Dynamics, development, and problems of human adjustment. Does not count toward meeting any departmental major or minor requirements.

241 Behavioral Measurement (4)
Prereq: 101 and 121. Tests, psychophysical methods, scaling techniques, and questionnaires. Basic criteria including reliability, homogeneity, and validity.

261 Industrial Psychology (4)
Prereq: 101 and 121. Survey of industrial and organizational psychology; emphasis on application of psychological theories and research to organizational situation.

273 Child and Adolescent Psychology (4) (2S)
Prereq: 101. Behavior from infancy through adolescence. No credit awarded if HECF 160 or EDEL 200 has been taken.

275 Educational Psychology (4) (2S)
Prereq: 101. Applications of psychological theory and models to process of education. Major emphases on development, learning, cognition, social factors, classroom climate, and evaluation. No credit awarded if EDCI 275 has been taken.

301 Experimental Sensory Psychology (4)
Prereq: perm. Sensory processes, including vision, audition, gustation, olfaction, and somesthesia.

303 Learning (4)
Prereq: 121 and 226. Experimental investigation of classical and instrumental conditioning, discrimination learning, generalization, related phenomena.

304 Human Learning and Cognitive Processes (4)
Prereq: 101 and 121 or perm. Theoretical and experimental investigations of learning in human beings; concept learning, problem solving, memory, motor skills, and language.

307 Psycholinguistics (4)
Prereq: 101, perm. How people produce, understand, and acquire language; psychological and linguistic theories. Emphasis on use of language.

310 Motivation (4)
Prereq: 9 hrs of psychology. Survey of theories of motivation, with emphasis on human motivation.

311 Perception (4)
Prereq: 101, perm. Theory and research on perception with emphasis on auditory and visual modalities. Basic process; perception of objects, space, movement, and events; effects of attention, set, and values; perceptual development.

312 Brain and Behavior (5)
Prereq: 101. Structure and function of nervous system. Introduction to research techniques used to study brain functions in animals and humans. Effects of brain lesions and electrical or chemical stimulation in animals and humans; evolutionary changes; impact of tumors, traumatic lesions, stroke, etc.; and biological bases of psychiatry. Animal lab demonstrations.

314 Comparative Psychology (5)
Prereq: 101. Behavior of animals across phylogenetic scale. Interaction of genetics, hormones, learning, etc., in development of behavior. Lecture, lab, field trips, and naturalistic movies.

315 Behavior Genetics and Individual Differences (5)
Prereq: 101. Extensive survey of individual differences and their relationship to genetic factors. Topics include chromosomal abnormalities, inborn errors of metabolism, genetic and prenatal screening, behaviors in infant, genetics and intellectual differences, psychopathology and genetics, racial differences, and continuing evolution of behavior.

321 Experimental Design and Analysis (5)
Prereq: 101 and 121 (226 recommended). Integration of variety of statistical procedures beyond elementary statistics level with experimental designs. Emphasis on understanding appropriate use of analytic techniques and interpretation of results. Does not apply to Arts and Sciences social science or natural science requirement.

327 Human Psychophysiology (4)
Prereq: perm. Relationships between psychological variables and physiological events in humans.

332 Abnormal Psychology (4) (2S)
Prereq: 101. Behavior disorders, their cause, and effects on person, family, and society.

333 Psychology of Personality (4)
Prereq: 101. Development and organization of personality, with evaluation of major theoretical viewpoints; research on personality structure, dynamics, and change.

335 Environmental Psychology (4)
Prereq: 101. Natural and built environments of everyday as factors of human behavior, cognition, and choice. Research concerning environmental design and evaluation from psychological standpoint emphasized.

336 Social Psychology (4)
Prereq: 101. Theory and research regarding social interdependence, interaction, and influence. Specific topics include attitudes

and persuasion, person perception, self, social attraction, helping, aggression, group behavior, influence in groups, and social conflict.

337 Social Psychology of Justice (4)

Prereq: 101 (336 recommended). Acquisition and application of concepts of justice; theories of adult and juvenile crime; psychological characteristics of justice system role occupants (e.g., judges, lawyers, police); psychological factors influencing arrests, plea bargaining, and trial procedures and outcomes (including line-ups, eyewitnesses, expert testimony, publicity, defendant and victim characteristics, jury selection and dynamics, sentencing); punishment issues (including prison reform, death penalty, parole).

351 Introduction to Clinical and Counseling Psychology (4)

Prereq: 12 hrs of psychology including 332 or 333. Diagnostic and remedial procedures and resources; professional problems, duties, skills, and interprofessional relationships.

374 Psychology of Adulthood and Aging (4)

Prereq: 101 or perm (273 recommended). Behavioral change and continuity over adult years through old age. Emphasis on interaction of psychological, sociocultural, and biological variables as they contribute to behaviors of aging individual from perspective of developmental framework.

376 Psychological Disorders of Childhood (4)

Prereq: 273 or HECF 160 or EDEL 200. Characteristics, etiology, and treatment of abnormal child behavior; developmental problems, neuroses, psychoses, behavior disorders, exceptional intellectual abilities, psychophysiological disorders.

390 Research in Psychology (1-5, max 15)

Prereq: 226, written perm. Supervised independent research on predefined problem.

489 Fieldwork in Psychology (1-5, max 5)

Prereq: written perm. Independent fieldwork as volunteer or employee in work directly related to psychology. Arrangements for course credit must be approved by psychology faculty member before fieldwork begins. Contact assistant chairperson for undergrad affairs or other faculty member to complete necessary forms. Graded credit/no credit.

490 Seminars in Psychology (3-5)

Prereq: dependent on seminar; perm required. Several seminars on specific topics in psychology offered yrly, carrying predetermined alphabetical designations (e.g., 490A). See specific exceptions under Catalog Numbers at beginning of this section. See Schedule of Classes for description each qtr.

491 Special Problems in Psychology (1-15)

Prereq: written perm. Independent work on special problem with any psychology professor.

492 Special Problems — Psychology (1-15)

Prereq: Study Abroad Program, perm.

496H Psychology Honors Seminar (3-5)

Prereq: perm, admission to departmental honors program. Seminar on specific topics. See Schedule of Classes each qtr.

497H Readings in Honors Work (1-4, max 10)

Prereq: perm.

498H Honors Work in Psychology (1-4, max 10)

Prereq: perm. Preparation for 499H.

499H Honors Work in Psychology (Thesis) (3-7, max 15)

Prereq: perm.

QUANTITATIVE BUSINESS ANALYSIS

In addition to the B.B.A. degree requirements, a student majoring in quantitative business analysis must complete 20 hours of 300- or 400-level quantitative business analysis courses. At least one 4-hour course shall be in each of the following areas: operations research and statistics. The other 12 hours, subject to an

advisor's approval, may be elected to gain depth in one of these areas. CSB 420 (CS 220) is also required.

A related major is computer systems in business. For a full description of the requirements for that major, see the *Colleges and Curricula* section of this catalog.

NOTE: Of the courses listed below, only QBA 201, 401, 454, 455, 485, 491, and 497 are offered each year. The quarters in which they are offered are indicated in parentheses in the course description. For courses marked with an asterisk students should check with the department to learn when they will be taught.

201 Introduction to Business Statistics (4)

Prereq: MATH 163A, 250B, and CSB 200. (fall, winter, spring, summer) Sample designs and estimation (point and interval) of parameters. Classical (hypothesis testing) decision theory. Contingency table analysis, simple regression, correlation analysis, and non-parametric statistics. Computer programs used for analysis when appropriate.

371 Statistical Analysis of Data (4)

Prereq: 201. Further topics in applied statistics. Design and analysis of survey samples. Analysis of variance. Modern decision analysis. Time series analysis (moving averages, smoothing procedures).

401 Operations Research (4)

Prereq: 201 and BA 310. (fall) Introductory survey of techniques of operations research, viewed as part of applied decision theory. Applications in fields of accounting, production, finance, and marketing stressed. Course topics such as inventory models, linear programming, network analysis, queuing models, simulation, dynamic programming, branch and bound methodology.

403 Statistical Quality Control (4)*

Prereq: 201. Application of sampling theory to quality control: in process control (i.e., control charts) and sampling inspection (i.e., attribute and variable).

434 Design of Experiments (4)*

Prereq: 201 or perm. Nested, split plot; replicated designs; multi-factor experiments; compounding; fractional factorials; analysis of covariance.

438 Nonparametric Statistics (4)*

Prereq: 201 or perm. Appropriate statistical tests; power; asymptotic efficiency; parametric vs. nonparametric; Fisher's randomization method; run test; multisample tests; 1-way ANOVA and 2-way ANOVA; miscellaneous tests.

445 Forecasting Business Trends (4)

Prereq: 201 or perm. (spring) Forecasting techniques and methodologies considered as tools decision-makers use to provide basis for determining nature of future environments in which business will have to operate. Forecasting is means for integrating total corporate planning with technical marketing and financial planning.

451 Statistical Survey Techniques (4)*

Prereq: 201 or equiv. Techniques of small sample tests applied in opinion polling, business, economics, and government.

454 Intermediate Probability Theory (4)

Prereq: 201 or equiv. (fall) Random variables — moment generating functions and expected multidimensional (continuous and discrete), values, limiting theorems.

455 Intermediate Statistical Inference (4)

Prereq: 454 or perm. (winter) Estimation, tests of hypothesis, sampling, analysis of variance, design of experiments.

456 Regression Analysis (4)*

Prereq: 201 or perm. Time series analysis, simple and multiple regression, and correlation analysis.

461 Bayesian Statistics (4)*

Prereq: 201. Probability and statistics taught from Bayesian point of view.

485 Simulation (4)

Prereq: 401 and FORTRAN or perm. (spring; even years) Development of models of complex management decision environments and their manipulation via computer simulation. GPSS programming language. Interpretation of simulation results. Applications to problems in marketing, finance, and production.

491 Seminar (4)

Prereq: perm. Selected topics of current interest in quantitative business analysis area.

497 Independent Research (1-15)

Prereq: perm. Research in selected fields of quantitative business analysis under direction of faculty member.

RADIO-TELEVISION

Associate Degree Program

The following R-TV courses are available only at the Zanesville campus for the A.A.S. program in radio-television.

122 Radio-Television Performance (4)

(winter) To provide overview of responsibilities required for radio and television announcing, and to provide practice and performance situations necessary to develop proficiency in performance skills.

209 Topics in Radio-Television Technology (2 per qtr, max 12)

Prereq: Intensive study of all functions of electronics as they relate to topics in field. Prepares students, who complete all topics, to take FCC General Class and/or SBE exams required for broadcast engineering positions. Lab time included, with instruction on operation of test equipment and facilities maintenance.

211 Radio Production-Direction (4)

Prereq: 208. (fall) Principles of basic radio production and development of criteria for evaluation of radio production. 2 lec, 4 lab.

214 Advanced Audio Production/Performance (2)

Prereq: 211. (spring) Innovative techniques for production and performance of audio materials. Investigation and analysis of audio production development, and individual problems.

216 Introduction to Television Production (4)

(fall) Principles of basic television production and development of criteria for evaluation of television production. 2 lec, 4 lab.

217 Advanced Television Production (4)

Prereq: 216. (spring) Applications of basic studio production with emphasis on innovative techniques. 2 lec, 4 lab.

257 Advertising in the Broadcast and Cable Media (4)

Prereq: 106. (winter) Introduction to principles and practices of advertising and selling of time in electronic media situations. Format includes substantial instruction and interaction with individuals employed in station sales departments, and preparation of materials for sales strategies and campaigns.

290 Broadcast Practicum (1)

Prereq: R-TV major. Production or technically related assignments monitored and supervised within broadcast related services of OU-Zanesville. Requires minimum number of assigned hrs of tasks per wk during school terms.

REAL ESTATE TECHNOLOGY

Real Estate courses are available on the Athens campus through Lifelong Learning Programs and at the regional campuses through Continuing Education Offices. An associate of applied business (A.A.B.) degree in business management technology with a real estate option is available at the Chillicothe campus.

101 Real Estate Principles and Practices I (4)

Real property is basic resource with which real estate professionals work. Course includes, but is not limited to: land and its description, rights and interests in real estate, contract law and real estate contracts, title transfer, deeds, leases, financing and mortgages, taxes, home ownership, urban planning, brokerage operations, appraisal and value, applied real estate math, and Ohio requirements for real estate licenses.

102 Real Estate Brokerage (4)

Prereq: 101 or perm. Expands on 101 and includes: specialized fields of real estate, principal-agent relationship, listing principles and practices, closing principles and practices, sales contract, principles of economics and real estate appraising, property insurance, real estate finance, federal laws regulating real estate practice, mathematics in real estate, and other facets of real estate needed by real estate professional; Ohio licensing laws and requirements.

103 Real Estate Law (4)

Prereq: 101. Includes all legal areas commonly concerned with typical real estate professional. Among topics covered are law of agency as applied to real estate brokers and salesmen, law of fixtures, estates, conveyancing of real estate, mortgages and liens, license laws of Ohio, and zoning.

201 Real Estate Appraising I (4)

Deals with appraisal theory, basic principles affecting value of real property; data accumulation and analysis of city, neighborhood, site, and property; applied techniques and estimating value from 3 approaches; building analysis, depreciation; entire range of appraisal process; and preparation based on field experience of preparing single-family residential appraisal report.

204 Real Estate Finance (4)

Prereq: 101. Includes institutions, methods, instruments, and procedures involved in financing of real estate; nature and characteristics of mortgage loans, government influence on real estate finance, and nature of mortgage market. Effects of monetary and fiscal policies on real estate financing considered.

221 Real Estate — Special Topics (4)

Prereq: 204. Special topics in real estate covered. Areas include professionalism, ethics, salesmanship, human relations, F.H.A. and V.A. financing. Real estate office, advertising, building construction and materials, current issues, and problems facing real estate professional also considered.

RESERVE OFFICERS TRAINING

See Aerospace Studies or Military Science.

RUSSIAN

See Foreign Languages and Literatures.

SECRETARIAL TECHNOLOGY, GENERAL

The following courses for the A.A.B. program in general secretarial technology are available only on the Chillicothe and Lancaster campuses. For availability of concentration areas, see the *Colleges and Curricula* section under University College.

111 Beginning Shorthand (3)

Introduction to theory of shorthand with emphasis on writing correct theory and developing reading rates. 3 lec, 2 lab.

112 Intermediate Shorthand (3)

Prereq: 111. Continuation of 111, completing theory, and developing skills of taking dictation and elementary transcription. 3 lec, 2 lab.

113 Advanced Shorthand (3)

Prereq: 112. Theory and speed building. Emphasis on developing speed in dictation and accuracy in transcription. 3 lec, 2 lab.

121 Beginning Typewriting (3)

Introduction to touch typewriting system with emphasis on correct techniques, mastery of keyboard, simple business correspondence, tabulation, and manuscripts. 3 lec, 2 lab.

122 Intermediate Typewriting (3)

Prereq: 121. Emphasis on production typing problems and speed building. Attention given to development of student's ability to function as expert typist producing mailable copies. Production work involves tabulations, manuscripts, correspondence, and business forms. 3 lec, 2 lab.

123 Advanced Typewriting (3)

Prereq: 122. Advanced typing problems and techniques, knowledge and skills involved in production typewriting. Designed to acquire maximum in production for high-level office employment. 3 lec, 2 lab.

128 Magnetic Media (3)

Prereq: 121, 122. Intensive study and operation of automatic keyboards in information system environments. Application of recording, logging, proofreading, and temporary and permanent revisions of information processing.

131 Secretarial Communications (3)

Review of basic English grammar with emphasis on improving capitalization and punctuation for more effective business-letter writing.

141L Legal Secretarial Terminology (2)

Prereq: 111, 121. (Chillicothe) Intensive course of study in legal terminology and vocabulary, including definitions, usage, derivations, and spelling. 2 lec.

141M Medical Secretarial Terminology (2)

Prereq: 111, 121. (Chillicothe) Structure of medical words and terms. Emphasis on spelling and defining commonly used prefixes, suffixes, root words, and their combining forms. 2 lec.

151 Speedwriting (3)

Prereq: 121. (Lancaster) Theory and application of alphabetic shorthand including development of basic dictation skill. Provides students with sufficient skill to produce mailable letters dictated at moderate rate.

168 Electronic Office Systems I (3)

Prereq: 121, 225, 231. Introduction to information system office. Covers discussions and skill development in transmittal services, written communications, and records filing and control.

171G General Secretarial Procedures I (3)

Prereq: 121. Instruction in general office practices and general office filing. Emphasis on general rules and procedures in filing and records management along with general office routines. Personality development also discussed thoroughly. 3 lec, 2 lab.

171L Legal Secretarial Procedures I (3)

Prereq: 111, 121. (Chillicothe) Instruction in legal office practices and legal office filing. Emphasis on general rules and procedures in filing and records management along with general office routines. Personality development also discussed thoroughly. 3 lec, 2 lab.

171M Medical Secretarial Procedures I (3)

Prereq: 111, 121. (Chillicothe) Instruction in medical office practices and medical office filing. Emphasis on general rules and procedures in filing and records management along with general office routines. Personality development also discussed thoroughly. 3 lec, 2 lab.

172G General Secretarial Procedures II (3)

Prereq: 171G. Continuation of 171G. Instruction in general office practices and filing.

172L Legal Secretarial Procedures II (3)

Prereq: 171L. (Chillicothe) Emphasizes machine transcription utilizing complete production units concerning legal correspondence and documents. 3 lec, 2 lab.

172M Medical Secretarial Procedures II (3)

Prereq: 171M. (Chillicothe) Emphasizing machine transcription utilizing complete production units concerning medical correspondence and documents, such as case histories, articles, and hospital reports. 3 lec, 2 lab.

178 Electronic Office Systems II (3)

Introduces student to duties of administrative support areas of office. Includes dealing with travel and conferences; obtaining research and organization of business data; and introduction to new office professions.

189 Independent Study (1-5)

Prereq: perm. Studies in selected subject areas in secretarial field. May be repeated up to 5 credit hrs.

218 Office Communications Dictation and Proofreading (3)

Introduction to proper procedure for dictating letters and reports; practice effective dictation techniques on equipment; dictate original data from outline to obtain final quality copy. Effective proofreading techniques emphasized.

221 Machine Transcription (3)

Prereq: 121, 122, 131. (Lancaster) Student becomes proficient in taking dictation from transcribing machine. Includes actual operation of machine, development of speed and accuracy in transcription, and mastery of other related transcription skills.

225 Word Processing I (3)

Prereq: 121 or equiv. (Lancaster) Theory of word processing including definition of terms and organization of word processing system. Career possibilities explored. Examines difference between word processing system and traditional office structure. Includes field trips to word processing centers and some experience working on text editors.

226 Word Processing II (3)

Prereq: 121 or equiv; 225. (Lancaster) Continuation of theory of word processing along with practical application using dedicated word processing system.

231 Office Machines (3)

Students instructed in use of electronic calculators as pertaining to common business computations, accounting, and computer functions.

239 Information Processing (3)

Prereq: 121, 225, 226. (Lancaster) Designed to introduce students to video word and information processing units with emphasis on personal computer.

241G General Dictation and Transcription I (3)

Prereq: 113, 123. Development of shorthand skills with emphasis on mailable copy. 3 lec, 2 lab.

241L Legal Dictation and Transcription I (3)

Prereq: 113, 123. (Chillicothe) Legal secretary preparation. Skill in taking dictation and transcribing material involving legal shorthand forms and phrases. Proficiency in use of legal vocabulary, forms, and procedures. 3 lec, 2 lab.

241M Medical Dictation and Transcription I (3)

Prereq: 113, 123. (Chillicothe) Medical secretary preparation. Skill in taking dictation and transcribing material involving medical shorthand forms and phrases. Proficiency in use of medical vocabulary, forms, and procedures. 3 lec, 2 lab.

242G General Dictation and Transcription II (3)

Prereq: 241G. Furthering of skills in taking dictation and transcribing various forms of correspondence. 3 lec, 2 lab.

242L Legal Dictation and Transcription II (3)

Prereq: 241L. (Chillicothe) Further development of skills in taking dictation and transcribing legal documents, instruments, and letters rapidly and accurately. 3 lec, 2 lab.

242M Medical Dictation and Transcription II (3)

Prereq: 241M. (Chillicothe) Further development of skills in taking medical dictation related to various types of medical correspondence such as case histories, articles, and hospital reports. 3 lec, 2 lab.

248 Administration of Record Systems (3)

Controlling cost and improving effectiveness of records and information management within business enterprises. Includes control of record creation, maintenance, and disposition through systems analysis; forms management, protection methods.

249 Internship I (2-5)

Prereq: 123, 231, 241. Practical field experience or in-class office simulation. 14-35 lab.

250 Seminar I (2)

Prereq: concurrent with 249. Special topics and problems encountered in field experience discussed. Opportunity to share ideas and experiences and to find possible answers to questions arising in actual working situations.

258 Stress Management for Office Personnel (3)

Prereq: PSY 101. Involves recognition of stress, how to handle stress within yourself; how to assist office personnel in dealing with stress, and implications of time in its relationship to stress.

262 Report and Letter Writing (4)

Prereq: 122 and 131 or ENG 150. Extensive and detailed practice in written communication using techniques utilized in business, industry, and professions involving composition of letters, memoranda, reports. 4 lec.

268 Information System Design (3)

Prereq: 226, BMT 110. Effective use of management techniques and equipment in meeting informational needs of business and industry. How to design optional system utilizing feasibility studies etc., and how to implement design.

269 Office Administration (3)

Prereq: 123, 172. Involves principles and practices of management of flow of information within enterprise. Includes basic management functions of planning, controlling, organizing, and coordinating as applied to office services, physical facilities, systems and procedures, work measurement and standards, and business information systems. 3 lec.

288 Information System Equipment Selection - Acquisition Seminar (2)

Remodeling or designing new facilities, including space management as well as source, cost, and justification for special equipment and furniture. Use of consultants, feasibility studies reviewed.

289 Special Topics (1-5)

Prereq: perm. Projects concerning secretarial field explored on 1-to-1 basis with instructor.

293 Seminar II (2)

Concurrent with 299. Continuation of discussion concerning special topics and problems encountered in field experience. 2 lec.

298 Practicum in W/P Supervision (2)

Experiences in supervision of word/data processing labs or centers. Responsibilities include assisting W/P trainees, demonstrating equipment to classes/visitors, producing complex documents, designing forms, learning/developing new systems.

299 Internship II (2-5)

Prereq: 249. Practical field experience or in-class office simulation continued. 14-35 lab.

SECURITY/SAFETY TECHNOLOGY

101 Introduction to Protective Services (3)

Introductory course designed to give overview of many facets of private security profession. Student will be able to relate private security's function to its proper perspective in today's complex society and to see where private security and its various functions fit into criminal justice system.

110 Physical Security Systems (3)

Physical security requirements and standards. Course includes study of various physical security systems plus technical devices employed in industrial, retail, and institutional security operations.

120 Occupational Safety and Health (3)

Analysis and implementation survey of federal laws pertaining to occupational safety and health standards and criteria.

201 Fire Safety and Fire Codes (3)

Function and objective of fire prevention programs, *i.e.*, recognition and correction of fire hazards; enforcement of codes and ordinances; knowledge of federal, state, and local fire laws and codes. Further emphasis on fire prevention and fire protection.

210 Loss Prevention in Modern Retailing (3)

Detailed study of use of proper controls in loss prevention and loss detection in retailing industry. Emphasis to provide students with sound background for determining their needs in such areas as: physical security, inventory security, security surveys, personal screening, risk analysis, and loss prevention as total systems approach.

220 Analysis of Security Needs — Survey (3)

Methodology used in making security, *i.e.*, selection of scope, team composition, design of survey, compiling data, evaluation of planning, implementation, and results of corrective measures.

230 Information and Data Systems Security (3)

Introduction to theory and application of automated information data systems. Detailed study of security hazards involved in use of data systems. Laws pertaining to Right to Privacy Act included as part of course content.

240 Security Administration (3)

Introduction to corporate security administration including historical and legal framework for security operations as well as detailed presentations of specific security processes and programs utilized in providing security.

250 Current Problems in Security (3)

Analysis of special problem areas in security such as: security education and training, community relations, labor problems, and disaster planning. Other specific areas analyzed for further research by individual students depending upon their interest. These later areas may include bank security, campus security, computer security, hospital security, and various other areas.

260 Analytical Accounting (3)

Specifically designed for security administration majors. Covers areas such as audit tracing, cash flow analysis, inventory system analysis, and other auditing principles used to protect assets and discover losses.

290A-Z Special Area Studies (3-4)

Courses designed to provide flexibility to satisfy needs of particular industry in our area or of individual student who would like to pursue further study in specialized area.

SOCIAL WORK

The Department of Social Work offers a flexible interdisciplinary curriculum designed to meet the requirements of students desiring to pursue professional careers in social work. Students completing the program will receive the A.B. degree with a major in social work. The Department of Social Work is fully accredited by the Council on Social Work Education. Graduates are qualified for full membership in the National Association of Social Workers.

The requirements consist of a minimum of 48 hours of courses taken within the department, including: SW 290, 391, 392, 393, 394, and the sequence in social work practice, SW 490A, 490B, 490C. A student seeking to enroll in the practice sequence should: (A) be a social work major; (B) have a 2.5 or above accumulative grade-point average; (C) have had either volunteer or paid experience in an area of social welfare; and (D) have made substantial progress in the completion of the social sciences requirements.

Additionally, the requirements for a major in social work consist of the following courses, taken outside the department: ZOOL 103, Human Biology; PSY 121, Elementary Statistics or SOC 350, Social Statistics; SOC 351, Elementary Research Techniques; PSY 273, Child and Adolescent Psychology; and PSY 332, Abnormal Psychology or PSY 336, Social Psychology. *In addition* to these, 42 hours must be taken in the social sciences, including one course in each of the following: anthropology, economics, political science, psychology, and sociology.

The department also offers the social service minor. The minor has been designed for students who will be pursuing a career in a social service organization. The requirement consists of a minimum of 26 hours, with at least 19 hours at the 300 level. The following courses are required: SW 101, 290, 391, 392, 393, and 394. In addition, at least one of the elective course offerings is required.

101 Introduction to Social Welfare and Social Work (3)

(2S)

Overview of field of social welfare with equal emphasis on fundamental concepts and services in social welfare and current and emerging tasks in profession of social work.

290 The American Social Welfare System (4)

(2S)

Prereq: ECON 101 recommended. (fall, winter) Nature of social welfare as social institution, stressing scope of social welfare activity; historical development; value orientation; response to

critical social problems, issues in social policy, and emergence of social work as profession.

380 Child Abuse and Neglect (3)

Prereq: jr or sr rank plus 18 hrs in social science. Examines processes of identification, reporting, referral, and case management of child abuse and neglect cases. Multidisciplinary approach to these processes described.

381 Counseling Older Adults (4)

Prereq: PSY 101 plus jr rank. Focuses on basic counseling, communication, and intervention skills needed by persons working with aged. Problems specific to later yrs discussed. Field work component provides opportunity for interaction with older adults.

382 Understanding Alcohol Problems and Alcoholism (4)

Prereq: jr or sr rank. Provides knowledge and understanding of developmental perspectives of alcoholism, consequences of excessive alcohol use and alcoholism, problems in special groups such as women, elderly, Black Americans, etc., and array of interventions used in various stages of illness and for family members along with discussion on rehabilitation of alcoholic person.

383 Introduction to Social Work Practice Methods (4)

Prereq: major, jr rank, or perm. Focuses on development of effective social work communication skills as they relate to social work relationship and professional practice.

391 Social Security System (4)

Prereq: 290 or perm. (winter, spring) Programs, policies, and problems related to prevention and alleviation of economic insecurity in U.S. Special emphasis on social insurance and public assistance programs with evaluation of proposals for change.

392 Contemporary American Social Services (4)

Prereq: 290 or perm. (fall, spring) Development of specific social services to meet human needs and evaluation in terms of their relevancy and adequacy in our present society. Individual studies in areas of particular interest (e.g., child welfare, mental health, etc.).

393 Dynamics of Human Behavior I (4)

Prereq: 18 hrs in social sciences. (fall) 1st in 2-course sequence designed to present holistic approach to assessing social functioning with emphasis on human diversity and integration of knowledge of behavior fundamental to practice of social work.

394 Dynamics of Human Behavior II (4)

Prereq: 393 and PSY 273. (winter) Expands on 393 and further examines development and functioning of individual within developmental, systems, and ecological framework.

395 Aging in the Welfare State (4)

Prereq: jr rank; plus 18 hrs in social sciences. Review of available knowledge on social life and problems of aged in America. Attention devoted to social welfare policies and services designed to meet needs of elderly.

396 Comparative Social Welfare Systems (3)

Prereq: 8 hrs of social welfare. Examination and comparison of social welfare problems and response-systems in various nations. Particular attention given to alternative modes of social service delivery.

490A Social Work Practice (8)

Prereq: 391, 392, 394, and perm. (fall) 1st of 3-qr sequence offering field placement, lab, and twice-wkly class. This qtr focuses on context of social work practice, application of social work's ethical value system, communication, and development of analytical skills for engaging in problem-solving process. (Students provide own transportation.)

490B Social Work Practice (10)

Prereq: 490A and perm. (winter) Continuation of field placement with increased time in placement and practice lab from previous qtr and twice-wkly class. Focus on phases of problem-solving process beginning with contact phase through implementation phase. (Students provide own transportation.)

490C Social Work Practice (10)

Prereq: 490B and perm. (spring) Continuation of previous qtr's field placement and practice lab with twice-wkly class. Final phases of problem-solving process, evaluation and termination, examined. Additional topical areas include: grantsmanship, teamwork, and effecting organizational change. (Students provide own transportation.)

493 Social Policy (4)

Prereq: 490A or perm. Examination of social policy stressing policy development; relationships of policy, goals and organizational structure, and decision-making patterns and role assignments within social welfare organizations and agencies.

498 Independent Studies and Special Projects in Social Work (1-10)

Prereq: 12 hrs in social work and perm. Student responsible for design and implementation of course of study or special project in area related to social work. Student interested in course must submit proposal for approval by dept chairman at least 30 days prior to enrollment in course. Course may be repeated until 10 hrs of credit earned.

SOCIOLOGY

The major requirement for the A.B. degree in sociology is a minimum of 45 quarter hours of courses in sociology, of which at least 16 hours must be at the 400 level, and including: introductory sociology (101 or 302), one course in methods (350 or 351), and one course in theory (403 or 404). (Courses in anthropology count toward the Arts and Sciences social science requirement.)

In addition to the major in sociology, the department offers a minor. The requirement for the minor is a minimum of 28 hours of coursework in sociology, of which at least 12 hours must be at the 400 level and include one course in methods (350 or 351) and one course in theory (403 or 404).

The Sociology Department also offers a special program of study in the area of criminology. See the section entitled Special Curricula, in this catalog, under the *College of Arts and Sciences* for information concerning the program.

101 Introduction to Sociology (5) (2S)

Nature of human society and factors affecting its development. Fundamental concepts of sociology: culture, personality, socialization, social organization, groups, institutions.

201 Contemporary Social Problems (4) (2S)

Prereq: 101 or soph rank or above. Selected sociological perspectives on social problems considered. Specific social problems analyzed may include problems related to crime, sexual inequality, marriage and family, minority groups, student protest, drug and alcohol abuse, mental illness, environment, and others.

210 Introduction to Social Psychology (4) (2S)

Prereq: 101 or soph rank or above. Patterning of conduct through social interaction; functional analysis of individual-group relationships in various organizational contexts; current theory and research in field.

211 Crowd and Mass Behavior (4) (2S)

Prereq: 101 or soph rank or above. Collective behavior resulting from social unrest; social contagion; formation and behavior of crowds; cults and sects; panic and disaster behavior; various types of mass behavior; impact upon social institutions.

220 Introduction to the Family (4) (2S)

Prereq: 101 or soph rank or above. Primary emphasis on American family and how it has been changing. Among specific topics explored are interaction within family, family in relation to other institutions, mate-selection, marriage and its alternatives, family disorganization, and future of American family.

223 American Society (4) (2S)

Prereq: 101 or soph rank or above. Sociological analysis of major contemporary social issues. Specific issues analyzed may include industrialization, urbanization, bureaucracy, militarism, structure of power, racism, inequality, abortion, and others.

230 Sociology of Poverty (4) (2S)

Prereq: 101 or soph rank or above. Critical examination of theories of poverty, how poverty is defined and measured, theoretical implications of research on poor, consequences of poverty, and strategies to fight poverty.

231 Sociology of Health and Health Care (4) (2S)

Prereq: 101 or soph rank or above. Examination of social definitions of health and disease, distributions of health and disease, and health care delivery. Particular attention devoted to medical

education, various health care delivery systems, and contemporary social issues in medicine.

233 Sociology of Sport (4)

Prereq: SOC 101 or jr or sr rank. Analysis of social aspects of sport, with emphasis on interrelationship of sport and society. Focuses on topics such as social values, education, sport roles, religion, socialization, mass media, sexism, and racism; oriented to student with interest in sports.

280 Sociology of Popular Music (4)

Prereq: 101 or 302. Popular music is meaning, performance, group activity, and industry, and expression of cultural forms, values, and concepts. Focuses on describing and analyzing these dynamics, with specific emphasis on messages, functions, and organizational behavior.

305 Readings in Sociology (1-6, max 6)

Prereq: 16 hrs and perm. Independent, directed readings designed to expand student's understanding in selected area of interest.

309 Sociology of Appalachia (4) (2S)

Prereq: 101 or perm. Intensive study of Appalachia from sociological perspective. Emphasis on population of Appalachia (number and distribution of inhabitants, characteristics of population, vital processes and migration), culture of rural poverty, acceptance of innovation and social change in Appalachia, major social institutions in area, and community power structure in Appalachia.

315 The Individual in Mass Society (4) (2S)

Prereq: jr or sr rank. Analysis of implication of cultural and social complexity for processes of individuation, identity formation, and identity maintenance. Consideration of simultaneous growth of secondary relations and dissolution of primary relations, and significance of these to social, psychological, and cultural organization as we approach automated society.

327 Sociology of Education (4)

Prereq: 8 hrs. School as social institution in relation to community and development of child; comparative systems of education; sociology of learning and teaching.

329 Minority Group Relations (4) (2S)

Prereq: 101 or jr or sr rank. Racial and ethnic problems in America; causes and consequences of prejudice and discrimination.

331 Class and Social Inequality (4)

Prereq: 8 hrs. Causes and consequences of class and social inequality in selected societies. Critical examination of ideologies that claim to justify inequality. Replaces 431.

334 Sociology of Aging (4)

Prereq: 101 or 302 and PSY 101; or 8 hrs of sociology; or perm. General introduction to social gerontology with emphasis on normal aspects of aging. Major emphasis on sociological dimensions of aging in context of such areas as socio-demographics of aging populations, values, roles, norms, self-concept, age stratification, aging patterns of minority groups, and application of current sociological theories of aging.

335 Economic Sociology (4)

Prereq: jr or sr rank; 8 hrs of sociology. Consideration of dynamics and social and cultural effects of various systems of power. Main focus to analyze extent to which selected capitalist and socialist systems produce concentrated power, inequality, alienated work and life styles, and imperialism; also to analyze strategies for change in U.S.

340 Population Analysis (4)

Prereq: 8 hrs. Social and cultural determinations and consequences of changes in fertility, mortality, and migration. Current and historical national and international population policies and programs.

350 Social Statistics (4)

Prereq: 101 or 302. Principles and procedures in treatment and presentation of quantitative social data. Methods of measuring central tendency, dispersion, and association. Scientific sampling, estimation, and tests of significance.

351 Elementary Research Techniques (4)

Prereq: 8 hrs. Research techniques in sociology. Research design; collection, recording, and analysis of data.

352 Field Studies in Sociology (1-10)

Prereq: 351 and perm. Planning, execution, and write-up of empirical study, utilizing skills developed in 351. Limited class meetings, conferences with instructor, research report.

356J Writing in Sociology and Anthropology (4) (1J)

Prereq: jr rank and perm or 13 hrs sociology and/or anthropology. Jr-level composition course for sociology and anthropology majors and students in related fields. Combines writing instruction with consideration of substantive social science topic. Students try various styles of social science writing (book reviews; grant proposals; field notes; interviews; etc.).

361 Deviant Behavior (4) (2S)

Prereq: 101 or jr or sr rank. Theory and research concerning major types of deviant behavior and societal reaction to such things as criminality, suicide, drug addiction, and mental disorders. Causes and consequences of deviant behavior.

362 Criminology (4)

Prereq: 8 hrs. Theories and research in criminal behavior and societal reaction to criminality. Causes and consequences of crime.

363 Juvenile Delinquency (4)

Prereq: 8 hrs. Theories and research in delinquency. Causes and consequences of delinquent behavior among juveniles.

365 Sociology of Mental Illness (4)

Prereq: 8 hrs or perm. Study of social and cultural foundations of mental illness, including review of historic and contemporary definitions of madness and treatment of mental illness. Distribution of mental illness in population and social factors related thereto. Nature of commitment process and legal, moral, and social implications of commitment. Examination of legal processes pertaining to criminal insanity.

366 Penology (4)

Prereq: 101; 361 or 362 or 363. Examination of history, operation, and problems of punishment. Patterns of prison organization, inmate group structure, personnel organization, and racism examined. Purpose and effectiveness of penal institutions described. Prisons, juvenile institutions, parole, halfway houses, and alternatives to punishment studied.

370 Sex Roles and Inequality (4)

Prereq: 8 hrs of sociology or perm. Examination of social and historical factors that have kept women subordinate to men in family and prevented them from achieving equality in labor force. Also explores prospects for change.

403 Development of Sociological Thought (4)

Prereq: 8 hrs. Major sociological concerns and concepts in relation to their social-historical setting. Special emphasis upon sociological thought in 18th and 19th centuries.

404 Modern Sociological Theory (4)

Prereq: 12 hrs. Critical examination of major sociological conceptual frameworks in 20th century.

406 Proseminar in Sociology (4)

Prereq: 20 hrs. Critical examination of selected theoretical and research problems. Primarily for advanced students in sociology.

408 Latin American Society (4)

Prereq: 8 hrs or prev course on Latin America or perm. Intensive study of Latin American society from sociological perspective. Emphasis on contemporary Latin American values, population problems, human-land relations, levels and standard of living, social institutions, urbanization, and social change.

412 Public Opinion Processes (4)

Prereq: 210 or 211. Attitudes and opinions in relation to formation of public opinion; political socialization and participation; social status, reference groups, decisionmaking; role of mass media.

413 Mass Communication (4)

Prereq: 210 or 211. Personal and social functions of content in newspapers, radio, television, and film. Types of audiences and communication effects. Organization and control of mass media and problems in evaluation.

414 Contemporary Social Movements (4)

Prereq: 8 hrs. Organized movements resulting in major social changes: revolutionary, nationalistic, reform, religious; agitation, leadership, ideology; case studies of typical movements.

416 Society and the Individual (4)

Prereq: 8 hrs sociology and psychology or perm. Exploration of compatibilities and/or contradictions in psychological systems, culture, and social structure.

419 Small Groups (4)

Prereq: 210 or 12 hrs of psychology. Major theories and methods for study of small group as unit of social systems; communication patterns, role definition, leadership, cohesion, etc.; review of current literature.

424 Urban Sociology (4)

Prereq: 8 hrs. Historical development and recent emergence of city as dominant feature of modern social life. Special emphasis upon demographic and ecological patterns and social organization of urban region.

425 Rural Sociology (4)

Prereq: 8 hrs. Historical developments and current trends in populations and communities in rural areas of U.S., with focus on implications for whole society of mechanization and industrialization of agriculture. Appropriate technology, back-to-the-land movement discussed.

426 Industrial Sociology (4)

Prereq: 8 hrs. Interrelationship between industrial and social order. Special attention to social organization and process within formal and informal structure of industrial unit.

428 Sociology of Religion (4)

Prereq: 8 hrs. Interrelationship between religious institution and social structure from comparative perspective and with particular reference to American society.

430 Sociology of Organization (4)

Prereq: 8 hrs. Concentrates on structure and process of formal organizations. Modern society dominated by giant bureaucracies. We shall study these bureaucracies in detail. Various sociological perspectives for viewing organizations considered and evaluated. Impact of organizations on individuals discussed and problems of living in society dominated by organizations treated in depth.

432 Political Sociology (4)

Prereq: 8 hrs. Social and cultural basis of influence, power, and authority. Emphasis upon informal aspects of political process in groups and institutions other than government.

433 Sociology of Occupations and Professions (4)

Prereq: 8 hrs. Professionalism as characteristic of modern economic and industrial complexes; popular conception and modern theory; social and technological preconditions; occupation-profession continuum; components, barriers, and strategy; mock-professionalism; motivation and satisfaction; controls; professionalism in particular professions.

453 Research Problems in Sociology (2-6)

Prereq: 20 hrs including 351 and written perm prior to registration. Individual research in specific problem areas in which student has demonstrated ability and interest.

464 Social Control (4)

Prereq: 12 hrs. Nature of institutional control and sociocultural constraint as they affect human behavior. Theories and research.

465 Social Change (4)

Prereq: 12 hrs. Dynamics and processes by which social change takes place; major theories of change; industrialization and modernization; social evolution and revolution; planned change; social impact of change.

SOUTHEAST ASIAN STUDIES

See International Studies.

SPANISH

See Foreign Languages and Literatures.

SWAHILI

See Foreign Languages and Literatures.

TELECOMMUNICATIONS

105 Introduction to Mass Communication (4) (2S)

Development, structure, functions, processes, control, and effects of mass media. 4 lec. Identical to JOUR 105 and INCO 105.

106 Introduction to Telecommunications (4)

History, organization, structure, and function of telecommunications.

121 Radio Performance (2)

Responsibilities and skills required of radio performer; practice in performance techniques for radio. 4 lab.

170 Media Perspectives (4) (2S)

Studies impact of electronic mass media through examination of uses, forms, themes, and implicit values. Combines lecture, discussion, and analysis of personal media uses.

200A Telecommunications Writing and Production Planning (4)

Prereq: soph rank. Introduction to nondramatic script writing in telecommunications. Examination of elements of preproduction preparation.

200B Audio Production I (2)

Prereq: 200A. Basic elements of audio program production and direction. Introduction to basic audio production skills.

200C Video Production I (2)

Prereq: 200A. Basic elements of video program production and direction. Introduction to basic video production skills.

270 Telecommunications and the Public (4)

Prereq: soph rank. Interrelationships among telecommunications, government, and public; evaluation of telecommunications' influence on society and impact of public pressure on broadcasting and cable.

308 Technical Bases of Telecommunications (5)

Principles of electronic reproduction and transmission of aural and visual signals; functions of audio and video equipment.

313 Audio Production II (4)

Prereq: 200B. Techniques for audio remotes and field production. Study of broadcast and nonbroadcast applications.

317 TV Studio Operations (1)

Prereq: 200C. Practical television studio experience with ACTV academic production unit.

318 Video Production II (4)

Prereq: 308, 317, jr rank. Basic video esthetics. Lab experience in production and direction of video projects.

322 Television Performance (4)

Prereq: 200C and audition. Advanced exercises in television performance stressing special problems of video performer.

355 Broadcast and Cable Programming (4)

Prereq: jr rank. Broadcast and cable programming principles and practices; analysis and evaluation of programs and program formats.

390 Practicum (1)

Prereq: TCOM majors and premajors only. Practical experience in Ohio University telecommunications facilities. May be repeated for max of 6 credits.

405 Research Internship (1-9)

Prereq: acceptance by competition only. Opportunity for students to implement and complete major research study under supervision.

413 Audio Production III (4)

Prereq: 313, jr rank. Advanced studio production techniques for audio, with introduction to multitrack recording. Study of technical and esthetic topics.

414 Multitrack Recording (3)

Prereq: 413 and perm. Operational aspects of recording studios including typical equipment set-ups, specialized and ancillary equipment. Various business as well as studio design considerations also discussed.

418 Video Production III A (4)

Prereq: 318 and perm. Development and production of projects as requested by Telecommunication Center for use by WOUB-TV.

419 Video Production III B (4)

Prereq: 318. Special projects in television production.

421 Nonbroadcast Video Systems (4)

Prereq: 200C, jr rank. Exploration of various applications of small systems, focusing on production and operational elements. Study of utilization in business, medicine, and instruction.

431 Dramatic and Documentary Writing (4)

Prereq: jr rank. Writing and critique of form, structure, and presentation of both dramatic and nondramatic programs and series.

432 Advanced Dramatic and Documentary Writing (4)

Prereq: 431 and perm. Advanced writing course in which experienced student creates substantive scripts in documentary and dramatic areas.

440 Public Broadcasting (4)

Prereq: sr rank. Historical development, current status, and challenges to public broadcasting.

441 Instructional Telecommunications (4)

Prereq: sr rank. Utilization of television in instruction: instructional television, commercial TV for instruction, and critical viewing skills.

452 Electronic Newsgathering (3)

Prereq: jr rank. Principles and practices of video production and editing for cable and television news. Identical to JOUR 452.

453 Telecommunications Law and Regulations (4)

Prereq: jr rank. Socio-political control of telecommunications; effects of law and regulations upon telecommunications policy and operation.

459 Audience Research (4)

Prereq: sr rank. Various methods, techniques, and applications of audience study in broadcasting and cable; includes study of current rating services.

460 Telecommunications Management (4)

Prereq: 355 or perm. Intensive overview of bases of telecommunications management; includes concepts relating to management theory, personnel motivation, organizational communication, and management's relationship to various aspects of organizational operation.

461 Telecommunications Financial Management (4)

Prereq: 460 or perm. Consideration of fiscal problems in operation of radio, television, and cable industries, with special emphases on economics and financial policies.

462 Broadcast and Cable Sales Management (4)

Prereq: 460 or perm. Consideration of policies and practices with reference to sales management in radio, television, and cable.

463 New Technology (4)

Prereq: sr rank. Investigation and description of new as well as traditional technologies found in communications industries. Viewings include videotapes of typical system installations; some field trips scheduled.

467 Comparative Systems of Telecommunications (4)

Prereq: sr rank. Analyses of national telecommunications systems in terms of relevant political, social, economic, and cultural influences.

470 Mass Communication Theories (4)

Prereq: sr rank. Readings course surveying literature in mass communication theory. Special emphasis on telecommunications.

471 Effects of Mass Communications (4)

Prereq: 470. Readings course designed to acquaint students with major areas of experimental research in individual and social effects of mass media.

479 History of Broadcasting (4)

Prereq: jr rank. Origin of systems of radio and television communication and their development to present.

484 Television Criticism (4)

Prereq: sr rank and perm. Survey of contemporary methods of critical analysis as applied to television. Screenings include television programs of past, present, avant-garde, mainstream.

486 Colloquium in Telecommunications (1-5)

Prereq: perm. Intensive study of special topics in field of telecommunications.

490 Internship in Telecommunications (8-12)

Prereq: sr rank and perm. Telecommunications experience under auspices of cooperating organization, with paper submitted detailing intern's experiences. Only 4 hrs can be used to satisfy TCOM electives.

497 Independent Production Projects (4)

Prereq: perm and written proposal. Independent projects in audio and video production.

498 Special Problems (1-4, max 12)

Prereq: written proposal and perm.

499 Independent Readings in Telecommunications (1-4, max 12)

Prereq: written proposal and perm.

THEATER

The following courses of instruction in theater provide the student with further clarification of the curricular requirements and models outlined in the School of Theater section of the College of Fine Arts chapter in *Colleges and Curricula*. It must be emphasized that all theater majors maintain close contact with their assigned advisors for guidance and clarification in programming. If an advisor has not been assigned, please contact the School of Theater office on the third floor of Kantner Hall. Further information concerning course listings may be received through the School of Theater office or the listed instructor.

101 Introduction and Orientation to the Theater as a Profession (1)

(fall) Acquaints theater premajors and other interested students with professional theater. Examines varieties of theater institutions (educational, commercial, regional, etc.), role of administrator, producer, and director and historical background for state of American theater.

102 Introduction and Orientation to the Theater as a Profession (1)

(winter) Continuation of 101 with particular emphasis on training and job opportunities for actors, scene designers, costume designers, and lighting designers.

103 Introduction and Orientation to the Theater as a Profession (1)

(spring) Continuation of 101 and 102 with particular emphasis on training and job opportunities for theater managers and arts administrators (stage managers, technical directors, house managers, business managers); training in other countries, history, purpose, and present function of theater unions; important theater journals and associations; and specialized training for related theater fields.

105 Practicum in Management (2-4)

Prereq: interview, fr rank. Supervised lab practice in problems of theater publicity, finance, and house management. May be repeated.

110 Introduction to Performance (4) (2H)

Introductory study of acting and actor. Emphasizes preparation of self and text, exploration of space, development of physical and vocal freedom through improvisation and theater games.

130 Technical Production: Scenery (3) (2H)

(fall) Principles of technical production. 2 lec, 1 lab.

131 Technical Production: Lighting (3) (2H)

(winter) Principles of technical production. 2 lec, 1 lab.

132 Technical Production: Costume (3) (2H)

(spring) Principles of technical production. 2 lec, 1 lab.

135 Practicum in Production Design (2-4)

Prereq: interview, fr rank. Supervised lab practice in design and execution of scenery, lighting, costumes, properties, and sound. May be repeated.

170 The Theater Experience (4) (2H)

Exploration of nature and function of theater as art form through exploration of performer/space/audience interrelationship. Attendance at selected rehearsals and performances of Ohio University Theater productions augment lecture and discussion sessions. Attendance at selected professional theatrical performances may be included.

171 Introduction to Play Analysis: A Basis for Production (3) (2H)

Prereq: 170. (winter, spring) Introduction to text analysis based on premise that understanding of play's text is important step toward understanding both performance of that play and means by which that performance is created. Attendance at Ohio University Theater productions is important augmentation to class lectures and group discussions.

205 Practicum in Management (2-4)

Prereq: interview, soph rank. Supervised lab practice in problems of theater publicity, finance, and house management. May be repeated.

210 Acting I (4)

Prereq: 110, soph or above and perm. (fall, winter) Principles and techniques of acting with major emphasis on developing trust and freedom. Warm-up techniques, theater games, improvisation, monologue exercises, and preliminary scoring techniques underline this introduction to work of actor.

211 Acting II (4)

Prereq: 210 and perm. (winter, spring) Continuation of training started in 210, with addition of more detailed character development, scoring techniques, and ensemble considerations through duet scene work.

212 Acting III (4)

Prereq: 211 and perm. (spring) For serious acting student this course completes sequential training program. Primary emphasis is to apply techniques learned in 210 and 211 to more lengthy and complicated scene structures. Long duet scenes and multi-character scenes or short plays used for study and performance. Grad directors and public performance frequently incorporated into final work in this course.

215 Practicum in Acting (2-4)

Prereq: audition, interview, soph rank. Supervised lab practice in rehearsal and public performance of roles. May be repeated.

216A Body Training (2)

Prereq: perm. (fall) Individual and group instruction in basic elements of body training for stage.

216B Body Training (2)

Prereq: 216A and perm. (winter) Continuation of 216A; see 216A for description; must be taken in sequence.

216C Body Training (2)

Prereq: 216B and perm. (spring) Continuation of 216A-216B; see 216A for description; must be taken in sequence.

217A Voice Training (2)

Prereq: perm. (fall) Individual and group instruction in basic elements of vocal training for stage.

217B Voice Training (2)

Prereq: 217A and perm. (winter) Continuation of 217A; see 217A for description; must be taken in sequence.

217C Voice Training (2)

Prereq: 217B and perm. (spring) Continuation of 217A-217B; see 217A for description; must be taken in sequence.

218A Voice/Speech Training for Broadcasters: Lesaac Approach (2)

Prereq: nonmajors. (fall, winter) Group and individual instruction in basic elements of vocal training through Lesaac system.

218B Voice/Speech Training for Broadcasters: Lesaac Approach (2)

Prereq: nonmajors; 218A. (winter, spring) Continuation of 218A; see 218A for description; must be taken in sequence.

218C Voice/Speech Training for Broadcasters: Lesaac Approach (2)

Prereq: nonmajors; 218B. (spring) Continuation of 218A-218B; see 218A for description; must be taken in sequence.

230 Stagecraft: Scenery (3)

Prereq: 130. (fall) Procedures and practice in theatrical production; practical experience. 2 lec, 4 lab.

231 Stagecraft: Lighting (3)

Prereq: 131. (winter) Procedures and practice in theatrical production; practical experience. 2 lec, 4 lab.

232 Stagecraft: Costume (3)

Prereq: 132. (spring) Procedures and practices in theatrical production; practical experience. 2 lec, 4 lab.

235 Practicum in Production Design (2-4)

Prereq: interview, soph rank. Supervised lab practice in design and execution of scenery, lighting, costumes, properties, and sound. May be repeated.

237 Basic Makeup (1)

Prereq: theater or perm. Theory and practice of stage makeup. 1 lec, 1 lab.

240 Introduction to Child Drama (2)

(fall) Informal theater by children and formal theater for children; their roles in artistic and educational development of children. 2 lec, 1 lab.

270 Theater History I (3) (2H)

(fall) Development of theater and drama in prehistoric, Greek, and Roman periods.

271 Theater History II (3) (2H)

(winter) Development of theater and drama in Medieval and Renaissance periods.

272 Theater History III (3) (2H)

(spring) Development of theater and drama from Renaissance to modern.

301 Play Production (4)

Fundamentals of theatrical production. Lab experience. 3 lec, 2 lab.

305 Practicum in Management (2-4)

Prereq: interview, jr rank. Supervised lab practice in problems of theater publicity, finance, and house management. May be repeated.

310 Scene Study I (2-4)

Prereq: 212 and perm. (fall) Intensive, performance-oriented experience for advanced undergrad actor. Concentrates on scripted material directed by 2nd-yr grad students, and designed to focus on actor's individual training needs.

311 Scene Study II (2-4)

Prereq: 212 and perm. (winter) Intensive study of and experience with nonscripted materials under supervision of master teacher and 2nd-yr grad directors. Experimental and improvisational theater are primary performance forms studied and experienced.

312 Scene Study III (2-4)

Prereq: 310 or 311 and perm. (spring) Extension of rehearsal/performance experience in 310 and 311. Advanced undergrad rehearses and performs in scenes directed by 2nd-yr grad directors, and selected to enhance dramatic range.

315 Practicum in Acting (2-4)

Prereq: audition, interview, jr rank. Supervised lab practice in rehearsal and public performance of roles. May be repeated.

316A Stage Movement (2)

Prereq: 216C; theater major. (fall) Principles and techniques of expressive movement.

316B Stage Movement (2)

Prereq: 316A. (winter) Principles and techniques of expressive movement.

316C Stage Movement (2)

Prereq: 316B. (spring) Principles and techniques of expressive movement.

317A Voice for the Stage (2)

Prereq: 217C; theater major. (fall) Principles and practice in vocal action for stage.

317B Voice for the Stage (2)

Prereq: 317A; theater major. (winter) Principles and practice in vocal action for stage.

317C Voice for the Stage (2)

Prereq: 317B; theater major. (spring) Principles and practice in vocal action for stage.

320 Directing I (4)

Prereq: 211. Principles and practices of directing for stage.

333 Theatrical Rendering (3)

Prereq: 230, 231, 232. (fall) Drafting, perspective, color, and rendering as applied to production design. 2 lec, 2 lab.

334 Scene Design (4)

Prereq: 333. (winter) Principles and projects in scene design as part of production design. 2 lec, 2 lab.

335 Practicum in Production Design (2-4)

Prereq: interview, jr rank. Supervised lab practice in design and execution of scenery, lighting, costumes, properties, and sound. May be repeated.

337 Advanced Makeup (3)

Prereq: 237. (fall) Corrective, 3-dimensional, and nonrealistic makeup; rubber prosthesis; character analysis. 1 lec, 2 lab.

338 Historical Bases of Design (4)

Prereq: 230, 231, 232. (spring) Art history from prehistoric times and application to production design. 4 lec.

340 Dramatic Literature for Children (3)

Prereq: 240 or theater major. (winter) Examination of plays for child audiences and literature for dramatization by children. 3 lec.

350 Playwriting (3)

(2H)

Prereq: perm. (winter) Theory and practice of dramatic writing.

380 Musical Theater Projects (1-4)

Prereq: perm. Participation in selected musical theater projects announced in advance of registration. Orientation may be either research or production.

402 Theater Management (4)

(fall) Procedures and practices in management of theater, including theater publicity, marketing, finance, ticket office, and house management.

405 Practicum in Management (2-4)

Prereq: interview. Supervised lab practice in problems of theater publicity, finance, and house management.

409 Independent Studies in Administration (1-6)

Prereq: perm. Allows advanced theater major to develop study project in aspects and problems of *theater administration* beyond normal course offerings.

410 Advanced Acting (3)

Prereq: 312 and perm. (winter) Exploration of specific problems in acting through use of exercises, monologues, and scenes.

413 Acting Internship (1-12)

Prereq: perm.

415 Practicum in Acting (2-4)

Prereq: audition/interview. May be repeated. Supervised lab practice in rehearsal and public performance of roles.

416 Advanced Stage Movement (2)

Prereq: 316C and perm. (winter) Connection and application of stage movement to role or roles in period plays; involves seeking out of tempos and rhythms of character and examining how they differ in various periods.

417 Advanced Voice Training: Dialects and Scansion (2)

Prereq: 317A, B, C or perm. (spring) Introduction to and experience in scanning essentials of versification as it particularly applies to reading of dramatic lines. Introduction to study of dialects through use of study tapes and other source materials.

419 Independent Studies in Acting (1-6)

Prereq: perm. Advanced theater major can develop study project in aspects and problems of acting beyond normal course offerings.

420 Directing II (4)

Prereq: 320. (winter) Practical experience in directing for stage.

421 Directing III (4)

Prereq: 420 or equiv and perm. (spring) Advanced directing project proposed by and awarded to sr undergrads who have demonstrated specific directorial talent and interest. Projects supervised and juried by total directing staff.

426 Stage Management (3)

Prereq: sr rank and/or perm. (fall) Theoretical course in techniques and methods of professional stage management.

427 Practicum in Stage Management (2-4)

Prereq: 426 and perm. Supervised practical experience in stage managing of university theater or related production.

429 Independent Studies in Directing (1-6)

Prereq: perm. Advanced theater major can develop study project in aspects and problems of *directing* beyond normal course offerings.

430 Advanced Stagecraft (4)

Prereq: 230, 231, 232, 333. (fall) Advanced problems of scenery construction, handling, and rigging. 2 lec, 2 lab.

431 Theory of Lighting (4)

Prereq: 230, 231, 232, 333. (spring) Creative processes in design and execution of lighting for proscenium and nonproscenium forms. 3 lec, 2 lab.

432 Costume Design (4)

Prereq: 438. (winter) Application of principles of design to stage costuming, with emphasis on fabrics, figure drawing, and characterization. 2 lec, 2 lab.

433 Scene Design II (4)

Prereq: 334. (spring) Challenges student with series of design projects based on past periods of dramatic literature and art.

435 Practicum in Production Design (2-4)

Prereq: interview. Supervised lab practice in design and execution of scenery, lighting, costumes, properties, and sound.

436 Properties and Special Effects (4)

(spring) Problems of properties, sound, and special effects. 2 lec, 2 lab.

438 History of Costume (4)

Prereq: 230, 231, 232. (fall) Development of dress and influence of cultural factors from Egyptian and Asian civilizations, including fabrics, accessories, and ornamentation. 4 lec.

439 Independent Studies in Production Design (1-6)

Prereq: perm. Advanced theater major develops study project in aspects and problems of *production design* beyond normal course offerings.

440 Children's Theater (3)

Prereq: 340 or theater major. (spring) Philosophies and practical production procedures for child audiences. 2 lec, 2 lab.

441 Creative Dramatics (3)

Prereq: 340 or perm. (spring) Methods and techniques of guiding children through art of creation of informal drama with special emphasis on elementary age children.

449 Independent Studies in Children's Theater (1-6)

Prereq: perm. Advanced theater major develops study project in aspects and problems of *children's theater* beyond normal course offerings.

450 Advanced Playwriting (3)

Prereq: 350 or perm. (winter, spring) Special problems in writing long play.

451 Playwrights Workshop (3, max 9)

Prereq: perm. Practical workshop experience for playwrights, directors, and actors with new scripts. May be repeated.

459 Independent Studies in Playwriting (1-6)

Prereq: perm. Advanced theater major develops study project in aspects and problems of *playwriting* beyond normal course offerings.

465 Practicum in Directing (1-4)

Prereq: perm. Supervised lab practice in planning and executing dramatic production.

470 Greek Theater and Drama (4)

(2H)

(fall, odd academic yrs) Drama, theater, and audience in ancient Greece. 4 lec.

471 Roman and Medieval Theater (4) (2H)
(winter, odd academic yrs) Intensive study of drama and theater of Roman and Medieval Europe. 4 lec.

472 Renaissance Theater and Drama (4) (2H)
(spring, odd academic yrs) Development of European theater and drama in Renaissance. 4 lec.

473 18th Century Theater (4) (2H)
(spring, odd academic yrs) Drama, theater, and audience in England from Restoration through 18th century. 4 lec.

474 Baroque European Theater (4) (2H)
(fall, even academic yrs) Detailed study of theater and drama of Europe in Baroque period. 4 lec.

475 19th Century European Theater (4) (2H)
(winter, even academic yrs) Major developments in drama and theater in Europe during 19th century. 4 lec.

476 Contemporary Theater (4) (2H)
(spring, even academic yrs) Trends and developments in 20th-century theater. 4 lec.

477A American Theater and Drama: 18th and 19th Centuries (3) (2H)
Prereq: jr or sr. (fall) Beginnings and development of American theater and drama from 1700 to 1900.

477B American Theater and Drama: 1900-1945 (3) (2H)
Prereq: jr or sr. New theater movement and drama in U.S. up to WW II.

477C American Theater and Drama: 1945-Present (3) (2H)
Prereq: jr or sr. Theater and drama in U.S. from WW II to present.

479 Independent Studies in Theater History and Criticism (1-6)
Prereq: perm. Advanced theater major develops study project in aspects and problems of *theater history and criticism* beyond normal course offerings.

480 Advanced Musical Theater Projects (2-4)
Prereq: 380 or equiv. Supervised scene study drawing from wide range of musical theater literature — opera to musical comedy and cabaret work. Each project designed and selected to meet individual student's needs and interests.

489 Independent Studies in Musical Theater (1-6)
Prereq: perm. Advanced theater major can develop study project in aspects and problems of *musical theater* beyond normal course offerings.

UNIVERSITY COLLEGE

110 Effective Study Skills (2)
Prereq: fr or perm. Review of basic study skills. Practice in effective reading techniques and differentiation of types of study. Vocabulary development, examination preparation, time management, and note taking also stressed.

112 Speed Reading and Comprehension (2)
Prereq: fr or perm. Emphasis on flexibility of reading patterns. Analyzes organizational patterns of printed materials; attempts to improve reading speed and comprehension levels while affecting students' attitudes toward reading.

115 The University Experience (2)
Prereq: fr rank. To help students adapt to demands of University as academic environment; assessing interests, values, and abilities; developing communication and coping skills; exploring academic majors and their requirements; establishing educational and career goals.

UNIVERSITY PROFESSOR

Courses are offered each year by the six University Professors selected the preceding academic year. The courses cover topics

chosen by the professors themselves, and may be offered only twice through the University Professor program. Often University Professor courses have joint freshman and upperclass sections. As the courses are special offerings, no permanent listing of descriptions in this bulletin is possible. See your college office for descriptions and registration information, or come to University College, 140 Chubb Hall.

Generally, a University Professor course offered within the professor's area of training and expertise will count toward area requirements of different colleges, where applicable. Otherwise the credit fulfills elective credit hours. *Be sure to check with your college office regarding application of University Professor course credit to college requirements.*

150 University Professor
Title, prereq, and credit hrs published in *Schedule of Classes*. Fall qtr fr-level UP course.

151 University Professor
Title, prereq, and credit hrs published in *Schedule of Classes*. Winter qtr fr-level UP course.

152 University Professor
Title, prereq, and credit hrs published in *Schedule of Classes*. Spring qtr fr-level UP course.

450 University Professor
Title, prereq, and credit hrs published in *Schedule of Classes*. Fall qtr upperclass-level UP course.

451 University Professor
Title, prereq, and credit hrs published in *Schedule of Classes*. Winter qtr upperclass-level UP course.

452 University Professor
Title, prereq, and credit hrs published in *Schedule of Classes*. Spring qtr upperclass-level UP course.

VISUAL COMMUNICATION

The curriculum in visual communication includes the three courses listed below plus a variety of photojournalism and picture editing courses offered through the E.W. Scripps School of Journalism and an equally varied selection of photo communications and photo illustration courses in the School of Art.

For more information, see a detailed description of the program in the *College of Communication* section of this bulletin or the *College of Fine Arts* section.

120 Introduction to Visual Communication (4)
Career-oriented survey of theory and technology of visual communication from ancient cave drawings to satellite relay of images.

121 Visual Communication Delivery Systems (4)
Theory and practice of visual communication techniques in printed media.

122 Visual Communication Practice (4)
Continuation of 121, with emphasis on broadcast and projection media.

WOMEN'S STUDIES

Women's Studies Certificate Program

This program is available as an option in any baccalaureate degree program offered by the University, regardless of the college in which the student is enrolled.

The requirements for the certificate are WS 100 Introduction to Women's Studies, 22 additional quarter hours earned in classes on the designated core list below, and WS 400.

	Credits
ANTH 358 Women: A Cross-Cultural Survey	4
ANTH 369C Birth and Mothering	4
AAS 482 The Black Family	5

ENG 153A Freshman Composition: Special Topics (Women and Men in Literature)	5
ENG 318 Women and Literature	4
HIST 314 Women in American History	4
HIST 360/560 Women in European History	4
HIST 381 History of the Family	4
HPES 400 Women in Sports	3
INCO 406/606 (LING 406/606) Sex Differences in Communication	5
LING 390 The Languages of Men and Women	3
POLS 420/520 Women, Law, and Politics	4
POLS 490V/590V Feminist Political Thought	5
SOC 220 Introduction to the Family	4
SOC 370 Sex Roles and Inequality	4
ZOOL 103 Human Biology	5
ZOOL 391 Biology of Human Sexuality	4

Additional courses are currently being developed. Experimental courses and certain courses offered under special topics and special studies rubrics will also count as core courses under appropriate conditions. The student should see the women's studies director for additional information on courses. The women's studies certificate is awarded upon graduation from Ohio University and the award is recorded on the permanent record (transcript). Students seeking the certificate must consult the director prior to the deadline for graduation to ensure that the certificate will be awarded.

100 Introduction to Women's Studies (4) (2H)

Study of female experience, drawing on materials from literature, autobiography, philosophy, history, law, myth, religion, and social sciences. Looks at cultural beliefs about women's nature and role in different times and places, representation of women and their relationships with others in myth and literature, and women's efforts to define new identity through work, creative activity, and through feminism, both historically and at present. Current issues explored.

ZOOLOGICAL AND BIOMEDICAL SCIENCES

Microbiology Major (major code #0411)

The major requirements for the B.S. in microbiology are as follows: MICR 411, 412, 413, 414, 415, 419, 463, and at least one of the following: MICR 211, 418, 441, BOT 310, or 420. Extradepartmental courses required include: ZOOL 150 and 325; BOT 111; MATH 163A or 263A; CHEM 141, 142, 143, 301, 302, 303, 304, and 325; PHYS 201 and 202. For fulfilling the quantitative Tier I requirement CS 220 or PSY 121 should be chosen. Though not required for the major, students preparing for advanced training should include the following: MATH 163B or MATH 263B and C, PSY 121, CHEM 351, PHYS 203, and CS 220.

Zoology Major (major code #2121)

The major requirements for the A.B. and B.S. in zoology degrees are a minimum of 40 and 50 quarter hours respectively in approved departmental courses. Departmental course requirements include ZOOL 150, 151, 325; 303, 430, or 435; 448 and 449 or 460 and 461; 375 or 477 or 479. Extradepartmental courses required for both the A.B. and B.S. degrees are: BOT 111; CHEM 141, 142, 143, 301, and 302; PSY 121; MATH 163A and B or 263A and B; and PHYS 201, 202, and 203.

Other Programs

Other programs are outlined in the *College of Arts and Sciences* section of this catalog for students preparing for animal behavior, animal systematics, dentistry, entomology, environmental biology, marine and freshwater biology, medical technology, medicine, optometry, pharmacy, physical therapy, veterinary medicine, wildlife biology, and zoology-nutrition, any one of which may also lead to a baccalaureate degree with a major in zoology. The outlined curricula should be consulted regarding the specific requirements for each; they do contain different sets of requirements from those given in the above paragraph. Students who wish to teach and also receive the A.B. or B.S. degree with a major in zoology or microbiology must satisfy requirements for both teaching certification and the major.

No grade which proves to be honestly and correctly issued by a departmental faculty member will be changed.

Microbiology

211 Environmental Microbiology (3) (2A)

Prereq: one qtr biological science or chemistry or perm. (spring) *J. Lawrence*. Natural microbial activities, their function in waste and pollution reclamation and disposal, water purification, food production and spoilage, and in public health. 3 lec.

212 Environmental Microbiology Laboratory (2) (2A)

Prereq: 211 or with 211. (spring) *J. Lawrence*. Characteristics and activities of microbes of special relevance to humans' welfare and those affecting maintenance of environmental quality. 2 lab.

297 Microbiology Tutorial (5)

J. Wilson. Special courses offered to students in Honors Tutorial program.

298 Microbiology Tutorial (5)

J. Wilson. Continuation of 297. See 297 for description.

299 Microbiology Tutorial (5)

J. Wilson. Continuation of 297-298. See 297 for description.

397 Microbiology Tutorial (5)

J. Wilson. Special courses offered to students in Honors Tutorial program.

398 Microbiology Tutorial (5)

J. Wilson. Continuation of 397. See 397 for description.

399 Microbiology Tutorial (5)

J. Wilson. Continuation of 397-398. See 397 for description.

411 General Microbiology (6)

Prereq: 10 hrs biological science; organic chemistry. (fall, winter) *S. Maier, R. Downey*. Properties of bacteria and other protists and their importance in our environment. Lab training in common bacteriological methods. 3 lec, 6 lab.

412 Microbiological Techniques (5)

Prereq: 411, perm. (winter) *S. Maier*. Semi-independent course gives microbiology major extensive experience in use of bacteriological techniques and equipment; information retrieval. 2 lec, 8 lab.

413 Pathogenic Bacteriology (6)

Prereq: 411. (winter) *M. Modrzakowski*. Microorganisms in relation to disease. Disease manifestations, diagnostic and control methods; some aspects of immunity. 3 lec, 6 lab.

414A Animal Virology (3)

Prereq: 411 and perm. (winter) *R. Walker*. Study of viral and rickettsial agents pathogenic to humans and animals. Isolation and identification methods, physico-chemical and biological properties. Pathology, cure, and prevention of selected prototype diseases. 3 lec.

414B Animal Virology Laboratory (2)

Prereq: to be taken concurrently with 414A; 411; perm. (winter) Limited to microbiology majors, others by perm if seats available. 4 lab and arr.

415 Immunology (6)

Prereq: 411. (spring) *R. Walker*. Fundamental concepts of immunity, how produced, advantages and disadvantages; fundamental immunological phenomena. 3 lec, 6 and arr lab.

416 Immunochemistry (6)

Prereq: 411, or 511 and perm. (fall) *R. Walker*. Structure of antigens and antibodies. Study of cells and organs participating in immune response. Immunopathology. Methods of isolation, purification, and chemical assay of antigens and antibodies. Immunization and study of immune responses in lab animals. 3 lec, 6 lab (arranged).

418 Epidemiology (4)

Prereq: 411 or 437 or 441, and perm. (fall) *R. Walker*. Mode of spread, cure, and prevention of communicable diseases in humans. 3 lec, 2 lab.

419 Microbial Physiology (6)

Prereq: 411, 463 or equiv. (spring) *S. Maier*. Nutrition, function, and metabolism of bacteria; pertinent lab work illustrating fundamental principles and various experimental techniques. 3 lec, 5 lab.

427 Molecular Genetics (3)

Prereq: 325 or BOT 431, organic chemistry; perm. (winter; alternate yrs) *J. Jollick*. Gene action and fine structure; biochemistry of heredity; cytoplasmic inheritance. 3 lec.

441 Parasitology (6)

Prereq: 151. (spring) *O. Heck*. Etiology of human parasites, their transmission, diagnosis, and prevention. 3 lec, 6 lab.

463 Cell Chemistry (4)

Prereq: organic chemistry. (fall, spring) *J. McQuate, J. Wilson*. Chemistry of carbohydrates, lipids, proteins, and nucleic acids. Principles of enzyme activity and kinetics; metabolic pathways. 4 lec.

482 Topics in Microbiology (1-6, max 8)

Prereq: 20 hrs of microbiology including 411; 2.5 g.p.a. in major courses; perm. Individual or small-group study of specialized topics in microbiology under supervision of instructor.

485 Undergraduate Research (1-3, max 12)

Prereq: 20 hrs and 2.5 g.p.a. in major courses; perm from specific professor. Independent research under supervision of staff member.

485H Undergraduate Research (1-4, max 12)

Prereq: 3.0 g.p.a. in sciences, perm. Individualized and directed research. Students select topics or are directed into possible research areas.

495H Undergraduate Research (Thesis) (3-9, max 15)

Prereq: 485H, 3.0 g.p.a. in sciences, sr rank. Independent departmental honors research under supervision of staff member. Student should enroll qtr he or she expects to complete thesis.

497 Microbiology Tutorial (5)

J. Wilson. Special courses offered to students in Honors Tutorial program.

498 Microbiology Tutorial (5)

J. Wilson. Continuation of 497. See 497 for description.

499 Microbiology Tutorial (5)

J. Wilson. Continuation of 497-498. See 497 for description.

Zoology

101 Principles of Biology (5) (2N)

Designed for nonscience majors. Principles of cell biology, physiology, ecology, genetics, and evolution. (Same as BOT 101.) Credit not allowed for both 101 and 150. 3 lec, 2 lab.

103 Human Biology (5) (2A)

P. Jones. Effect of humans on ecosystem, including pollution and population relationships. Emphasis on drugs, their abuse, their pharmacology, and recent research findings on effects of drugs on humans. Reproductive physiology, contraceptive technology and research, biological aspects of abortion, and venereal disease. 5 lec.

150 Introduction to Zoology (6) (2N)

Prereq: CHEM 141 (or concurrent) recommended. (fall, winter) Designed for science majors, preprofessional (biological), and science modular students. Principles of cell biology, physiology, development, and genetics. Credit not allowed for both 101 and 150. 4 lec, 4 lab.

151 Introduction to Zoology (6) (2N)

Prereq: 150 or BOT 110 or perm. (winter, spring) *J. Rouner*. Continuation of 150. Designed for science majors, preprofessional, and science modular students. Principles of evolution, ecology, and behavior; and lab survey of major phyla. 4 lec, 4 lab.

225 Genetics in Human Society (3) (2N)

Prereq: 101 or 150 or BOT 101 (for non-zoology majors; no credit for those who have credit for 325). (winter) Basic principles of inheritance in humans. Normal and abnormal chromosome con-

stitutions, gene-protein interrelationships, and factors that cause mutations of genes and chromosomes. Significance of genetics in life of human society. 3 lec.

271 Field Ornithology (2)

(spring) *H. Seibert*. Techniques and identification of birds in field in southeastern Ohio. 4 lab.

275 Animal Ecology (4) (2N)

Prereq: 151; not open to fr. (winter) Relation of animals to their habitat, to each other, and to humans. General principles of terrestrial and aquatic communities, ecosystems, and humans' involvement. 3 lec.

297 Zoology Tutorial (5)

J. Wilson. Special courses offered to students in Honors Tutorial program.

298 Zoology Tutorial (5)

J. Wilson. Continuation of 297. See 297 for description.

299 Zoology Tutorial (5)

J. Wilson. Continuation of 297-298. See 297 for description.

300 Elements of Human Anatomy and Histology (6)

Prereq: 151; not open to fr; may be taken concurrently with 345. (spring) *R. Hikida, S. Simpson*. Basic tissues and organ systems of human body. Cat used for dissection. 4 lec, 4 lab.

301 Human Anatomy (6)

Prereq: 101, not open to fr. (fall, winter) *F. Hagerman*. Structure of body systems with particular emphasis on human skeletal and neuro-muscular systems. Cat used for dissection. For physical education and prephysical therapy students only. 3 lec, 6 lab.

303 Comparative Vertebrate Anatomy (6)

Prereq: 151, not open to fr. (winter, spring) *B. Allen*. Comparative study of body systems of vertebrates, with lab work covering various type forms. 5 lec, 4 lab.

305 Histological Technique (4)

Prereq: 151, jr or sr rank. (fall, spring) *J. Gault, W. Peterson*. Principles and methods of preparing animal tissues for microscopic study. 1 lec, 6 lab.

325 General Genetics (5)

Prereq: 151 or BOT 111. (fall, spring) Principles and concepts of genetics as revealed by classical and modern investigation. 5 lec.

326 Laboratory Genetics (4)

Prereq: 325. (winter) *J. McQuate, J. Jollick*. Experiments with *Drosophila*, bacteria, and bacterial viruses designed to illustrate principles of genetics. Preparation of slides and karyotyping of chromosomes of humans. 6 lab.

345 Human Physiology (4)

Prereq: 300 or 301 or concurrently with 300 or 301; not open to fr. (spring) *F. Hagerman*. Functions of various systems as applied to humans. Special reference to physiological adaptations to environment and regulatory functions. For education, medical technology, physical education, and prephysical therapy students only.

346 Human Physiology Laboratory (3)

Prereq: anatomy, 345 or with 345. (spring) *F. Hagerman*. Lab experiences designed to complement material covered in 345. For prephysical therapy students; others by perm only. 6 lab.

352 Kinesiology (4)

Prereq: 301. Analysis of human motion based on anatomical and mechanical principles. 4 lec. (Same as IPES 302.)

364 Forensic Biology (4)

Prereq: for forensic chemistry students only. (spring, alternate yrs) *J. Gault, O. Heck*. Provides experience in microscopic techniques; identification of hair and fibers, identification and grouping of blood including chemical, immunological, and electrophoretic methods and identification of semen. 2 lec, 6 lab.

373 Human Behavior (5) (2N)

Prereq: not open to fr. (fall or winter) *J. Rouner*. Introduction to human ethology and sociobiology. Zoological views on parent-young interactions, nonverbal communication, bonding, sexuality, aggression, and other aspects of our behavior. Data from primate, child, and cross-cultural studies. 5 lec.

376 Ecology Laboratory (3) (2N)

Prereq: 151 or 275, not open to fr. (spring) *Staff*. Analysis of field problems in ecology; consisting of design of field experiments and hypothesis testing, techniques to gather and analyze field data, interpretation of results, and report writing. 6 lab.

382 Topics in Zoology (1-3)

Prereq: 150 or BOT 110, perm of specific instructor. Individual or small-group study, under supervision of instructor, of topics not otherwise available to undergrad students. Credit not applicable toward major in zoology or microbiology.

382A Clinical Laboratory Observation (1)

J. Gault. Gives student opportunity to observe activities characteristic of clinical lab. Observations made in hospital setting so that, along with other background information provided, student may be better able to evaluate lab work as career choice.

384 Bioethical Problems in Biology and Medicine (5)

Prereq: 9 hrs biological science. (winter) *W. Witters*. Ethical problems arising from rapid advances in biological and biomedical research. Topics include: human experimentation, fetal research, informed consent, death with dignity, euthanasia, biological engineering, reproductive advances, sex control, test tube babies, surrogate mothers, behavioral modification with drugs, electronics and surgery, health care delivery, mental health, and genetic screening. 5 lec.

390 Biology and the Future of Man (5)

Prereq: perm. (spring) *W. Witters*. Course covers human sexuality, physiological effects of environmental pollutants, drugs of abuse, and introduction to advances in biological technology that influence future of humans. Those having had 103 must do special projects due to some repetition. 5 lec.

391 Biology of Human Sexuality (4)

Prereq: 2 biology courses. Investigation of biological aspects of human sexuality. Emphasis on biological mechanisms concerning: fertilization, sex of child, development and growth, human sexual responses, sexual variation and deviation, sexual dysfunction and therapies, drug influence on sexuality, modern reproductive technologies, and contraceptive research.

397 Zoology Tutorial (5)

J. Wilson. Special courses offered to students in Honors Tutorial program.

398 Zoology Tutorial (5)

J. Wilson. Continuation of 397. See 397 for description.

399 Zoology Tutorial (5)

J. Wilson. Continuation of 397-398. See 397 for description.

404 Comparative Vertebrate Anatomy — Mammalian (6)

Prereq: 303. (fall) *B. Allen*. Continuation of 303. Anatomy of mammals with particular emphasis on cat. 3 lec, 6 lab.

406 Vertebrate Embryology (6)

Prereq: 300 or 303. (winter, spring) *W. Peterson*. Development from gametogenesis to organogenesis in representative vertebrate types with lab emphasis given to chick and pig. 4 lec, 4 lab.

407 Developmental Biology (5)

Prereq: 448 or 463 or perm. (spring 1985; alternate years thereafter) *L. Edds*. Mechanisms of animal development at tissue, cellular, and molecular levels of organization, with emphasis on experimental approaches. 3 lec, 4 lab (3 + 1 arranged).

408 Histology (6)

Prereq: 303. (winter) *O. Heck*. Cells, tissues, and organ systems with regard to their morphological and physiological properties. 4 lec, 4 lab.

427 Molecular Genetics (3)

Prereq: 325 or BOT 431, organic chemistry; perm. (winter; alternate yrs) *J. Jollick*. Gene action and fine structure; biochemistry of heredity; cytoplasmic inheritance. 3 lec.

428 Human Genetics (4)

Prereq: 325. (winter; alternate yrs) Genetics of humans including normal and abnormal chromosomology; human biochemical genetics; genes in individuals, kindreds, populations, and evolution. 4 lec.

429 Marine Biology (5)

Prereq: 151; perm; 430, GEOL 211, recommended. (spring) *W. Hummon*. Biological processes in marine and estuarine habitats, and adaptations for life in sea; emphasis on environmental variables affecting distribution, abundance, and dynamics of marine organisms. Includes 12-dy field trip to tropical marine environment during spring break and 5-dy field trip to temperate marine environment late in qtr; estimated cost \$200 per student; limited to 12 students. 3 lec, field trips.

430 Invertebrate Zoology (6)

Prereq: 151 or perm. (fall) *W. Hummon*. Structure, function, systematic, and ecological relationships among full range of phyla. 4 lec, 4 lab.

431 Limnology (4)

Prereq: 151, BOT 111, CHEM 143 or equiv, or perm. (winter) *W. Hummon*. Physical, chemical, and biological processes in freshwater habitats; distribution, abundance, and dynamics of populations; structure, organization, and productivity of communities. 4 lec.

432 Field Hydrobiology (3)

Prereq: 431. (spring) *W. Hummon*. Methods and analysis of field collection data from standing and running water ecosystems, with emphasis on community structure and function under natural and polluted water conditions; special reference to acid mine pollution. 6 lab.

434 Biology of Spiders (5)

Prereq: 151. (fall; alternate yrs) *J. Rovner*. Morphology, physiology, behavior, ecology, and classification of spiders. Lab includes taxonomic and behavioral studies. 3 lec, 4 lab.

435 General Entomology (6)

Prereq: 151 or BOT 111. (fall) *W. Romoser*. Overview of morphology, physiology, systematics, and general biology of insects. 3 lec, 6 lab.

437 Medical Entomology (4)

Prereq: 151. (winter; alternate yrs) *W. Romoser*. Relationship of insects and related arthropods to human disease. 3 lec, 2 lab.

439 Field Entomology (6)

Prereq: 151 or BOT 111. (spring) *W. Romoser*. Systematics, evolution, ecology, and behavior of insects with emphasis on field collection and identification. 3 lec, 6 lab.

441 Parasitology (6)

Prereq: 151. (spring) *O. Heck*. Etiology of human parasites, their transmission, diagnosis, and prevention. 3 lec, 6 lab.

442 Helminthology (6)

Prereq: 151. (fall; alternate yrs) *O. Heck*. Biology of parasitic worms with emphasis on physiology, classification, life histories, and host response. 3 lec, 6 lab.

445 Physiology of Exercise (4)

Prereq: 345. (fall) *G. Dudley, F. Hagerman*. Fundamental concepts describing reaction of organ system to exercise/muscle metabolism and work evaluation; special reference to physical fitness, sport conditioning, and environmental adaptations to exercise. 4 lec. (Same as HPES 414.)

446 Physiology of Exercise Laboratory (2)

Prereq: 345, or perm; required for those enrolled in 445. (fall) *F. Hagerman, G. Dudley*. Lab experiences designed to complement 445/545. 4 lab. (Same as HPES 415/515.)

448 Cell Physiology (4)

Prereq: organic chemistry or perm. (winter) *J. Wilson*. Analysis of fundamental cellular activities with emphasis on membrane structure and function, bioelectric potentials, contractile mechanisms. Also includes mitochondrial and chloroplast structure and function, bioluminescence, chromatophore activity, cell growth and development, and evolution of eukaryotic and prokaryotic cells. 4 lec.

449 Cell Physiology Laboratory (4)

Prereq: 448 or 463 with 448 or 463. (winter) *J. Wilson*. Lab experiments designed to illustrate experimental bases of principles of cell chemistry and physiology. 6 lab.

450 Principles of Endocrinology (4)

Prereq: 460 or 448 recommended. (fall) *P. Jones*. Endocrine control of mammalian homeostasis and metabolism. 4 lec.

451 Endocrinology Laboratory (4)

Prereq: 450. (spring) *P. Jones*. Experimental techniques pertinent to study of endocrine glands including surgical ablation of 1 or more glands, using rats. 6 lab.

452 Advanced Endocrinology (3-4)

Prereq: 450. perm. (winter) Discussion of current research in mammalian endocrinology. Emphasis on reproduction controls and mechanisms. 3 lec.

453 General Pharmacology (3)

Prereq: 463 or CHEM 489 or CHEM 490 or perm. (winter) *H. Akbar*. Principles of pharmacology; a survey of important drugs used in medicine and their therapeutic application. 3 lec.

457 Animal Systematics (3)

Prereq: 151 and 325; 477 or 479. (winter; alternate yrs) *S. Moody*. Principles and methods of systematic zoology. Numerical methods and hypothetico-deductive reasoning applied to study of organismic diversity (taxonomy) and geographic distribution (zoogeography). Use of computer stressed. 3 lec, 2 hr disc. and computer work.

460 Animal Physiology (4)

Prereq: 151, CHEM 143. (spring) *J. Wilson*. Principles of animal physiology with emphasis on comparative, regulatory, and adaptive aspects of neuromuscular and neuroendocrine regulation, circulation, excretion and osmotic and temperature regulatory mechanisms. 4 lec.

461 Animal Physiology Laboratory (4)

Prereq: 460 or with 460. perm. (spring) Lab exercises designed to illustrate experimental basis of principles covered in 460. 6 and arranged lab.

463 Cell Chemistry (4)

Prereq: organic chemistry. (fall, spring) *J. Wilson, D. Greenlee*. Chemistry of carbohydrates, lipids, proteins, and nucleic acids. Principles of enzyme activity and kinetics; metabolic pathways. 4 lec.

464 Cell Chemistry Laboratory (3)

Prereq: with or following 463 or 448. (winter) *J. Gault, J. Wilson*. Basic procedures in qualitative and quantitative analysis of biological compounds. 3 lab.

466 Comparative Neurophysiology (4)

Prereq: 448, 460, or perm. (winter; alternate years) *W. Costello*. Basic aspects of cellular neurobiology; overall introduction to neural systems. Lectures and student seminars.

467 Neurophysiology Laboratory (2)

Prereq: 466 or with 466 or perm. (winter) *W. Costello*. Lab sessions using advanced techniques in cellular neurobiology to illustrate lecture topics in 466. Training in manufacture and use of bioelectrodes. Some reports required in form of journal article.

468 Ichthyology (4)

Prereq: 151. (spring; alternate yrs) *J. Eastman*. Lecture course emphasizing selected aspects of biology of major families of freshwater and marine fishes. Topics include morphology, physiology, taxonomy, evolution, ecology, behavior, and zoogeography. 4 lec.

470 Medical Technology Clinical Internship

J. Gault. 52-week clinical internship includes theoretical and practical coursework in all phases of clinical lab science at accredited school of medical technology affiliated with Ohio University. Required of all students completing Medical Technology Program.

471 Ornithology (3)

Prereq: 151. (winter) Bird biology, including discussions on behavior, adaptations, life histories, and role of ornithology in current ecological theory. 3 lec.

472 Herpetology (5)

Prereq: 20 hrs zoology. (spring; alternate years; will be offered 1985) *S. Moody*. Survey of biology of amphibians and reptiles, with lab on identification of local forms and field work on natural history of seasonally active species. 3 lec, 4 lab.

473 Animal Behavior (5)

Prereq: 151 or perm. (winter; alternate yrs) *J. Rouner*. Ecological, physiological, and developmental aspects of animal behavior, interpreted from perspective of evolutionary biology. 4 lec, 2 lab.

474 Mammalogy (6)

Prereq: 151. (fall) *G. Svendsen*. Mammals; their origin, evolution and adaptations, geographical distribution, ecology, and systematics. Emphasis on local fauna. 4 lec, 4 lab.

475 Sociobiology (3)

Prereq: 479 or perm. (spring; alternate yrs) *G. Svendsen*. Current understanding of how and why animal social behavior evolved, including spacing, mating, and parental behavior of solitary as well as social animals. Lectures, reading, and reports. 3 lec.

477 Population Ecology (4)

Prereq: 151 and PSY 121 or equiv. (fall) *W. Hummon*. Quantitative aspects of sampling and ecology of both plant and animal populations, with emphasis on conceptual framework and its application to natural populations. 3 lec, 2 prob sessions.

478 Population Ecology Laboratory (3)

Prereq: 477 or with 477. perm. (upon demand) *W. Hummon*. Field and lab exercises designed to illustrate and supplement concepts treated in 477. 6 lab.

479 Evolution (4)

Prereq: 325. (winter) *G. Svendsen*. Current concepts of evolutionary processes; sources of variability, adaptation, speciation, co-evolution, and phylogeny. 4 lec.

480 Biological Research Methods (2-4)

Prereq: perm.

480A Microscopy and Photomicrography (3)

Prereq: perm. (fall) *W. Peterson*. Principles, techniques, and applications of light microscopy including darkfield, phase-contrast, polarizing, fluorescence, and interference-contrast methods. Introduction to techniques of recording microscopic images.

482 Topics in Zoology (1-6, max 8)

Prereq: 20 hrs of zoology including 151; 2.5 g.p.a. in major courses, perm. Individual or small-group study of specialized topics in zoology under supervision of instructor.

485 Undergraduate Research (1-3, max 12)

Prereq: 20 hrs and 2.5 g.p.a. in zoology, perm from specific professor. Independent research under supervision of staff member.

485H Undergraduate Research (1-4, max 12)

Prereq: 3.0 g.p.a. in sciences, perm from specific professor. Individualized and directed research. Students select topics or are directed into possible research areas.

490 Psychopharmacology: Drugs, Society, and Behavior (5) (2A)

Prereq: 1 yr biology: jr-sr, perm. (spring 1984; alt yrs) *W. Witters*. Introduces prevention, intervention, and treatment modalities for abused drugs. Emphasis on psychotomimetic drugs, psychopharmacology, reasons for drug use and abuse, and success in use of these psychotomimetics in therapeutics. 5 lec.

494S Life Sciences, Communications, and Media (5)

Prereq: sr rank; 2 qtrs of biology. (winter 1985; alt yrs) *W. Witters*. Integration of scientific information with written and verbal communication skills. Students will be exposed to recent advances in life sciences and have opportunity to analyse and write on these advances.

495H Undergraduate Research (Thesis) (3-9, max 15)

Prereq: 485H, 3.0 g.p.a. in sciences, sr rank. Independent departmental honors research under supervision of staff member. Student should enroll qtr he or she expects to complete thesis.

497 Zoology Tutorial (5)

J. Wilson. Special courses offered to students in Honors Tutorial program.

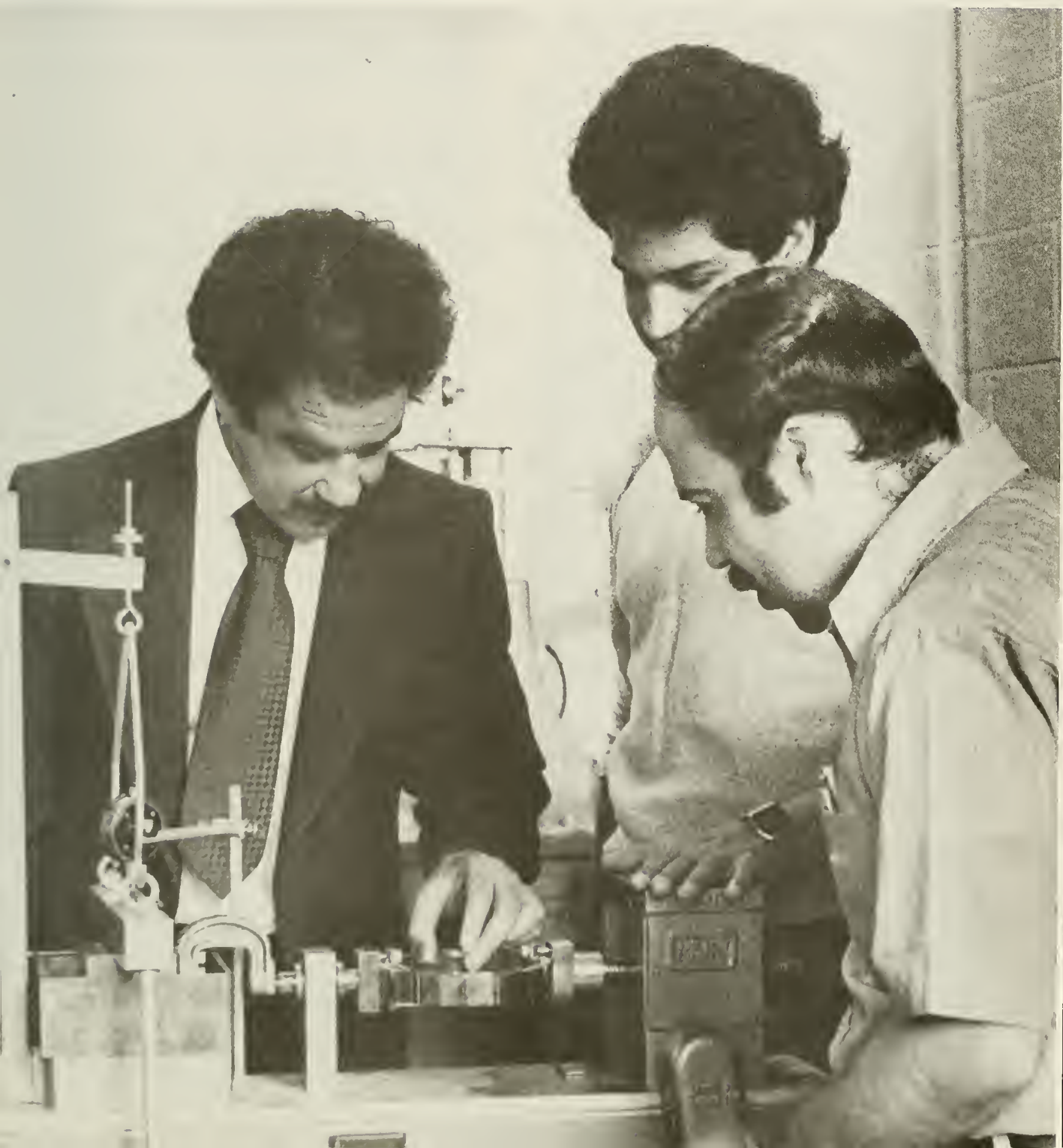
498 Zoology Tutorial (5)

J. Wilson. Continuation of 497. See 497 for description.

499 Zoology Tutorial (5)

J. Wilson. Continuation of 497-498. See 497 for description.

Faculty and Administration



Departmental Faculty

The following listings were submitted by the dean's office in each college in May, 1984, and verified in the Provost's Office. The regional campus faculties are listed after the main campus faculty.

ACCOUNTING

Prof: Charles H. D'Augustine, Ph.D., *Florida State U.*; Warren Reininga, M.C.S., *Indiana U.*, C.P.A.; William Voss, Ph.D., *U. of Chicago*

Assoc. Prof: Ted Compton, Ph.D., *U. of Cincinnati*; James S. Cox, Ph.D., *U. of Pittsburgh*; Clarence B. Stephenson, M.B.A., *George Washington U.*, C.P.A.; Donald V. Stuchell (chairman) M.A.S., *U. of Illinois*, C.P.A.

Asst. Prof: Joseph N. Hilton, Ph.D., *U. of Arkansas*

Instr: Barbara Olejzar, M.B.A., *Ohio U.*; Susan A. Spataro (part-time), M.B.A., *Ohio U.*

AEROSPACE STUDIES

Prof: David L. Mitchel (chairman), M.A., *Central Michigan U.*

Assoc. Prof: Richard W. Krapf, M.P.A., *Golden Gate University*; Jeffrey D. Montgomery, M.S., *Eastern Illinois U.*; Larkin R. Smith, M.S., *Central Missouri State*

AFRO-AMERICAN STUDIES

Prof: Francine Childs, Ed.D., *East Texas Univ.*

Assoc. Prof: Robert Rhodes, M.A., *U. of Cincinnati*; Vattel T. Rose (chairman), Ph.D., *U. of Minnesota*

Asst. Prof: Robert L. Douglas, Sr., Ph.D., *U. of Iowa*

ART

Prof: John Baldwin, M.F.A., *Instituto Allende*; David Hostetler, M.F.A., *Ohio U.*; Abner Jonas (director), M.F.A., *U. of Iowa*; David R. Klahn, M.F.A., *U. of Wis. Madison*; William Kortlander, Ph.D., *U. of Iowa*; Ronald Kroutel, M.F.A., *U. of Michigan*; Henry Lin, M.F.A., *U. of Washington*; Dana Loomis, M.F.A., *Cornell U.*; Clifford McCarthy, M.S., *U. of Wis. Madison*; Edward Mayer, M.F.A., *U. of Wisconsin*; Gary Pettigrew, M.F.A., *Ohio U.*; Donald Roberts, M.F.A., *Ohio U.*

Assoc. Prof: Robert Borchard, M.S., *U. of Wis.*; Terrill Eiler, M.F.A., *Ohio U.*; Aethelred Eldridge, M.S.D., *U. of Michigan*; Erik Forrest, A.T.D., *U. of Edinburgh*; Arnold Gassan, M.A., *U. of New Mexico*; Karen Nulf, M.A., *Michigan State U.*; Judith Perani, Ph.D., *Indiana U.*; Gary Schwindler, Ph.D., *U. of Calif. Los Angeles*; Daniel Williams, M.A., *U. of Oregon*; Joseph Zeller, M.F.A., *Alfred U.*

Asst. Prof: Marilyn Hunt, M.A., *Indiana U.*; Mary Manusos, M.F.A., *U. of Wis.*; Edward Pieratt, M.A., *Ohio U.*

Instr: Molly Alicki (part-time visiting), M.F.A., *California College of Arts & Crafts, Oakland*; Barbara Bosworth, M.F.A., *Rochester Institute of Technology*; Jane Bruce (part-time visiting), M.F.A., *Royal College of Art, London, England*; Michael Kroeger (visiting), B.S., *Univ. of Cincinnati*; Charles McWeeny, M.F.A., *Univ. of Oklahoma*; Jeanee Redmond, M.F.A., *Clemson University*; Bernard Stone (part-time) M.F.A., *Kansas University*

AVIATION

Prof: Francis Fuller (chairman), B.S., *Ohio U.*

Asst. Prof: Joan Mace, B.S., *Ohio U.*; Lance Dale, M.A., *Ohio U.*

BOTANY

Dist. Prof: Norman Cohn, Ph.D., *Yale U.*

Prof: James Cavender, Ph.D., *U. of Wisconsin*; Laurence Larson, Ph.D., *Purdue U.*; Robert Lloyd, Ph.D., *U. of California at Berkeley*; Charles Miller, Ph.D., *U. of North Carolina, Chapel Hill*; Gar Rothwell, Ph.D., *U. of Alberta*; Ivan Smith, Ph.D., *U. of London*; Irwin Ungar (chairman), Ph.D., *U. of Kansas*; Warren Wistendahl, Ph.D., *Rutgers State U.*

Assoc. Prof: James Braselton, Ph.D., *Iowa State U.*; James Graffius, Ph.D., *Michigan State U.*; John Mitchell, Ph.D., *Edinburgh U.*; Richard Rypma (adjunct), Ph.D., *Ohio State U.*

Asst. Prof: Philip Cantino, Ph.D., *Harvard U.*; Gene Mapes (adjunct), Ph.D., *U. of Iowa*

CHEMISTRY

Dist. Prof: William Huntsman, Ph.D., *Northwestern U.*

Prof: Jesse Day, Ph.D., *Case Inst. of Tech.*; David Hendrick, Ph.D., *Iowa State U.*; Clifford Houk, Ph.D., *Montana State U.*; Robert Ingham, Ph.D., *Iowa State U.*; Robert Kline, Ph.D., *U. of Wisconsin, Madison*; Howard Latz (chairman), Ph.D., *U. of Florida*; Paul Sullivan, Ph.D., *U. of Waterloo*; Robert Sympson, Ph.D., *U. of Illinois*; James Tong, Ph.D., *U. of Wisconsin, Madison*; Thomas Wagner, Ph.D., *Northwestern U.*

Assoc. Prof: John Blazyk, Ph.D., *Brown U.*; Peter Johnson, Ph.D., *U. of Birmingham*; Gary Pfeiffer, Ph.D., *Carnegie-Mellon U.*; Gene Westenbarger, Ph.D., *U. of California, Berkeley*; Robert Winkler, Ph.D., *U. of Michigan*

Asst. Prof: Jared Butcher, Jr., Ph.D., *U. of Tennessee*; Ronald R. Williams, Ph.D., *U. of Georgia*

COMPARATIVE ARTS

Prof: James Conover, Ph.D., *Northwestern U.*; Robert Wortman (chairman), Ph.D., *Florida State U.*

Assoc. Prof: Michael Harper, Ph.D., *U. of NC Chapel Hill*; Jessica Timmis, Ph.D., *Ohio U.*

Asst. Prof: Dorothy Murray, Ph.D., *Ohio U.*

COMPUTER SCIENCE

Prof: Richard Butrick, Ph.D., *Columbia University*; Larry E. Snyder, Ph.D., *Purdue U.*; Langdon Taylor, Ph.D., *U. of California at Los Angeles*; Yin-Min Wei, Ph.D., *U. of Iowa*

Assoc. Prof: Klaus Eldridge (chairman), Ph.D., *U. of Colorado*; J. Craig Farrar, Ph.D., *U. of Illinois*; John Gillam, Ph.D., *Michigan State U.*

Asst. Prof: Larry Irwin, M.S., *Ohio U.*; Joylyn Reed, Ph.D., *Auburn University*

DANCE

Prof: Gladys Bailin (director), B.A., *CUNY Hunter College*; Shirley Wimmer, M.A., *New York U.*

Assoc. Prof: Patricia Welling, B.S., *Wayne State U.*

Asst. Prof: Michelle Geller, M.F.A., *New York U. School of Arts*; Madeleine Scott, M.A., *U.C.L.A.*; Margaret Tchong, *U. of Utah*

Instr: Eileen Cohan Clark, B.M., *U. of Cincinnati*

Lect: Frederick Kraps; Betty Walberg (visiting), B.A.

ECONOMICS

Dist. Prof: Lowell Gallaway, Ph.D., *Ohio State U.*; Lee Soltow, Ph.D., *U. of Wisconsin at Madison*

Charles O'Brien Prof. Emeritus: Meno Lovenstein (part-time), Ph.D., *Johns Hopkins U.*

Trustees Prof. Emeritus: Harry Crewson (part-time), Ph.D., *Ohio State U.*

Prof: Douglas Adie, Ph.D., *U. of Chicago*; Edwin Charlé, Ph.D., *Indiana U.*; Burton DeVea, Ph.D., *U. of Minnesota*; Ismail Ghazalah, Ph.D., *U. of Calif.-Berkeley*; David Klingaman, Ph.D., *U. of Virginia*; Rajindar Koshal (chairman), Ph.D., *U. of Rochester*; David Levinson, Ph.D., *U. of Wisconsin at Madison*; John Peterson, Ph.D., *U. of Chicago*; Vishwa Shukla, Ph.D., *U. of Wisconsin at Madison*; Richard Vedder, Ph.D., *U. of Illinois*

Assoc. Prof: Paul Deuster, Ph.D., *U. of Wisconsin at Madison*

Asst. Prof: Khosrow Doroodian, Ph.D., *U. of Oregon*; Jan Palmer, Ph.D., *Michigan State U.*; Richard P. Numrich, M.A., *SUNY Albany*; Rosemary Rossiter, Ph.D., *U. of Wisconsin-Milwaukee*; Robert Craig Shelburne, Ph.D., *U. of NC Chapel Hill*

Visiting Instr: David Kreutzer, M.A., *Virginia Polytechnic Institute*

Prof. Emeritus: Fred Picard (part-time), Ph.D., *Syracuse U.*

EDUCATION — APPLIED BEHAVIORAL SCIENCES AND EDUCATIONAL LEADERSHIP

Prof: Robert Barcikowski, Ph.D., *SUNY Buffalo*; Fred Dressel, Ed.D., *Indiana U.*; Max Evans, Ph.D., *Ohio State U.*; James Grubb, Ph.D., *Ohio U.*; Luther Haseley, Ed.D., *U. of Toledo*; Donald Knox, Ed.D., *Case Western U.*; Joseph Sligo, Ph.D., *U. of Iowa*; Thomas Sweeney, Ph.D., *Ohio State U.*; Melvin Witmer, Ph.D., *Florida State U.*

Assoc. Prof: Sally Navin, Ph.D., *Ohio State U.*

Asst. Prof: Paul Bredeson, Ph.D., *U. of Wisconsin-Madison*; Glenn Doston, Ph.D., *Northwestern U.*; Crystal Gips, Ed.D., *Boston U.*; James Hartman, Ph.D., *Kent State U.*; Jane Myers, Ph.D., *U. of Florida*

EDUCATION — CURRICULUM AND INSTRUCTION

Morton Prof. of Math Education: Leonard Pikaart, Ed.D., *U. of Virginia*

Prof: Jason Brunk, Jr., Ed.D., *U. of Maryland*; Monroe Johnson, Ed.D., *U. of Tennessee*; Albert Leep, Ed.D., *Ball State U.*; Ragy Mitias, Ph.D., *Ohio State U.*; Allen Myers, Ph.D., *U. of Iowa*; Milton Ploghoft, Ed.D., *U. of Nebraska*; William Rader, Ph.D., *Purdue U.*; Edward Stevens, Jr., Ed.D., *U. of Rochester*; James Thompson, Ph.D., *Ohio State U.*; Roman Warmke, Ph.D., *U. of Minnesota*

Assoc. Prof: Arthur Clubok, Ph.D., *U. of Michigan*; Larry Jageman, Ed.D., *U. of Northern Colorado*; Reba Pinney, Ph.D., *Ohio U.*; Sally Schaaf, Ph.D., *Ohio U.*; Charles Smith, Jr., Ed.D., *Wayne State U.*; Seldon Strother, Ph.D., *Kent State U.*; Barbara van der Veur, Ed.D., *U. of Illinois*; Richard Walker, Ed.D., *Northern Illinois*

Asst. Prof: Gary Bates, Ph.D., *U. of Wisconsin-Madison*; Pamela Cemen, Ph.D., *Indiana U.*; Patricia Hoessli, M.S.E., *Arkansas State U.*; Ralph Martin, Ph.D., *U. of Toledo*; Norma Nutter, Ed.D., *U. of Kentucky*; Sondra Rebottini, Ed.D., *West Virginia U.*; Barbara Reeves, Ed.D., *U. of Kentucky*; Sallie Roberts, M.A., *Ohio U.*; Dwight Rogers, Ph.D., *U. of Florida*; Stephen Safran, Ph.D., *U. of Virginia*; Scott Sparks, Ph.D., *U. of Florida*; George Wood, Ph.D., *U. of Illinois*

EDUCATION — CENTER FOR ECONOMIC EDUCATION

Prof: Roman Warmke (director), Ph.D., *U. of Minnesota*

EDUCATION — CENTER FOR HIGHER EDUCATION

Milton Ploghoft (director), Ed.D., *U. of Nebraska*

EDUCATION — EDUCATIONAL MEDIA CENTER

Dawn O'Neal (cataloger), M.Ed., *Ohio U.*; Sandi Vitek (media technician), M.A., *Michigan State U.*

EDUCATION — PROFESSIONAL LABORATORY EXPERIENCES

Assoc. Prof: Margaret Hoy, M.Ed., *Ohio U.*; Richard Walker, Ed.D., *Northern Illinois*

Asst. Prof: William Bartels, M.Ed., *Ohio U.*

Instr: Howard Delamatre, M.Ed., *Bowling Green*; Joan Fucci, (part-time), M.S., *U. of Pittsburgh*; Jane Meyers, M.Ed., *Ohio U.*; Marie Roos, Ph.D., *Indiana U.*

ENGINEERING, CHEMICAL

Prof: William Baasel, Ph.D., *Cornell U.*; Calvin Baloun, Ph.D., *U. of Cincinnati*; John Collier, Ph.D., *Case Institute of Technology*; Nicholas Dinos (chairman), Ph.D., *Lehigh U.*; Harold Kendall, Ph.D., *Case Institute of Technology*; Robert Savage (Russ professor), Ph.D., *Case Institute of Technology*; Carleton Sperati (adjunct), Ph.D., *U. of Illinois*

Asst. Prof: Wen-Jia Russell Chen, Ph.D., *Syracuse U.*

Lect: Keith Wamsley (adjunct), B.S., *West Virginia U.*

Prof. Emeritus: Richard S. Mayer, Ph.D., *U. of Michigan*

ENGINEERING, CIVIL

Prof: Harry Kaneshige (acting chairman), Ph.D., *U. of Wisconsin-Madison*; Reuben Olson, Ph.D., *U. of Minnesota*

Assoc. Prof: Fathy Akl, Ph.D., *U. of Calgary*; Glenn Hazen, Ph.D., *Penn State U.*; Edward Russ, M.S.C.E., *Clarkson College of Technology*

Asst. Prof: Tiao Chang, Ph.D., *Purdue U.*; Shad Sargand, Ph.D., *Virginia Polytechnic Institute and State University*

ENGINEERING, ELECTRICAL AND COMPUTER

Prof: Nikitas Alexandridis (visiting), Ph.D., *UCLA*; Hollis Chen (acting chairman), Ph.D., *Syracuse U.*; Joseph Essman, Ph.D., *Purdue U.*; Harold Klock, Ph.D., *Northwestern U.*; Henryk Lozykowski, Ph.D., *N. Copernicus U., Torun, Poland*; Richard McFarland, Ph.D., *Ohio State U.*; Satyanrayana Raju, Ph.D., *Polytechnic Institute of Brooklyn, New York*; Robert Redlich (part-time), Ph.D., *Rensselaer Polytechnic*

Assoc. Prof: Robert Curtis, Ph.D., *New York U.*; Herman Hill, Ph.D., *West Virginia U.*; Nasser Jaleeli (adjunct), Ph.D., *Imperial College, London*; Brian Manhire, Ph.D., *Ohio State U.*; Janusz Starzyk, Ph.D., *Technical Univ. of Warsaw*

Asst. Prof: Kent Chamberlin, Ph.D., *Ohio U.*; Albert Fakheri (adjunct), Ph.D., *Polytechnic Institute of Brooklyn, New York*; Robert Lilley, Ph.D., *Ohio U.*; Koji Ogino-Tanaka, Ph.D., *VPI and State U.*; Roger Radcliff, Ph.D., *W. Virginia U.*

Instr: Ralph Burhans (part-time), A.B., *Oberlin College*; John Golzy (part-time), M.S., *Ohio U.*; Victor Hanna (part-time), M.S., *Youngstown State U.*

Prof. Emeritus: James Gilfert, Ph.D., *Ohio State U.*; Harry Hoffee, M.S.E.E., *Ohio U.*

ENGINEERING, INDUSTRIAL AND SYSTEMS

Prof: Prashanta Chatterjee, Ph.D., *U. of Michigan*; Charles Overby, Ph.D., *U. of Wisconsin-Madison*; Donald Scheck, Ph.D., *Purdue U.*; Robert Williams (chairman), Ph.D., *Ohio State U.*; Helmut Zwahlen, Ph.D., *Ohio State U.*

Asst. Prof: Kwan S. Lee, Ph.D., *U. of Michigan*; Ralph Rogers, M.S.I.S.E., *Ohio U.*

Instr: Russell Kelch (part-time), M.S., *Ohio U.*

Prof. Emeritus: Ralph Smith, M.S.M.E., *U. of Wisconsin-Madison*

ENGINEERING, MECHANICAL

Prof: O. E. Adams, Jr., Ph.D., *Lehigh U.*; William Beale (adjunct), M.S., *California Inst. of Technology*; Roy Lawrence (chairman), Ph.D., *Southern Methodist U.*; T. Richard Robe, Ph.D., *Stanford U.*

Assoc. Prof: Kenneth Halliday, Ph.D., *U. of Massachusetts*; Jay Gunasekera, Ph.D., *U. of London*; Israel Urieli (adjunct), Ph.D., *Witwatersrand Univ.*

Asst. Prof: Khairul Alam, Ph.D., *California Inst. of Technology*; Ravi Chandran, Ph.D., *Lehigh U.*

Instr: David Berchowitz (adjunct), M.S., *Witwatersrand Univ.*

Prof. Emeritus: Lewis Hicks, M.S., *Johns Hopkins U.*

ENGLISH

Dist. Prof: John Matthews, M.A., *Ohio State U.*; Hollis Summers, Ph.D., *U. of Iowa*

Trustees Prof: Taylor Culbert, Ph.D., *U. of Michigan*

Prof: Laurence Bartlett, Ph.D., *Michigan State U.*; James Davis, Ph.D., *Florida State U.*; Robert DeMott, Ph.D., *Kent State U.*; Wayne Dodd, Ph.D., *U. of Oklahoma*; Raymond Fitch, Ph.D., *U. of Pennsylvania*; Roy Flannagan, Ph.D., *U. of Virginia*; Peter Heidtmann, Ph.D., *U. of Wis. at Madison*; John Hollow, Ph.D., *U. of Rochester*; John Jones, Ph.D., *U. of Florida*; Daniel Keyes, M.A., *CUNY Brooklyn College*; Earl Knies, Ph.D., *U. of Illinois*; Julia Lin, Ph.D., *U. of Washington*; Dean McWilliams, Ph.D., *U. of Oregon*; Lester Marks, Ph.D., *Syracuse U.*; Vance Ramsey, Ph.D., *U. of Oklahoma*; Barry Roth, Ph.D., *Stanford U.*; Duane Schneider (chairman), Ph.D., *U. of Colorado*; Harold Swardson, Ph.D., *U. of Minn.*; Calvin Thayer, Ph.D., *U. of Calif-Berkeley*; James Thompson, Ph.D., *U. of Cincinnati*; Arvin Wells, Ph.D., *U. of Michigan*; Edgar Whan, Ph.D., *U. of Michigan*

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